



Functionality Test Results Comparison Report

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Table of Contents

| | | |
|----------|--------------------------------------------------------------|-----------|
| 1 | Functionality Test Results Comparison Report | 3 |
| 1.1 | Background..... | 3 |
| 1.2 | Purpose..... | 5 |
| 1.3 | Scope..... | 6 |
| 1.4 | Process | 6 |
| 2 | Gateway Availability | 9 |
| 2.1 | GA-1 – Gateway Availability – IMA-GUI..... | 9 |
| 2.2 | GA-2 – Gateway Availability – IMA-EDI | 10 |
| 3 | Pre-Order | 11 |
| 3.1 | PO-2 – Electronic Flow-through..... | 11 |
| 3.2 | PO-3 – LSR Rejection Notice Interval..... | 12 |
| 3.3 | PO-4 – LSRs Rejected..... | 13 |
| 3.4 | PO-5 – Firm Order Confirmation Interval..... | 14 |
| 3.5 | PO-6 – Work Completion Notification Timeliness..... | 15 |
| 3.6 | PO-7 – Billing Completion Notification Timeliness..... | 16 |
| 3.7 | PO-8 – Jeopardy Notice Interval..... | 17 |
| 3.8 | PO-9 – Timely Jeopardy Notices..... | 19 |
| 4 | Ordering and Provisioning | 23 |
| 4.1 | OP-3 – Installation Commitments Met..... | 23 |
| 4.2 | OP-4 – Installation Interval..... | 28 |
| 4.3 | OP-5 – New Service Installation Quality..... | 35 |
| 4.4 | OP-6 – Delayed Days..... | 37 |
| 4.5 | OP-7 – Coordinated “Hot Cut” Interval..... | 42 |
| 4.6 | OP-13 – Coordinated Cuts on Time..... | 43 |
| 5 | Maintenance & Repair – Non-Designed Services..... | 44 |
| 5.1 | MR-3 – Out of Service Cleared Within 24 Hours..... | 44 |
| 5.2 | MR-4 – All Troubles Cleared Within 48 Hours..... | 45 |
| 5.3 | MR-6 – Mean Time to Restore..... | 45 |
| 5.4 | MR-7 – Repair Repeat Report Rate..... | 46 |
| 5.5 | MR-9 – Repair Appointments Met..... | 47 |
| 6 | Maintenance & Repair – Designed Services | 49 |
| 6.1 | MR-3 – Out of Service Cleared Within 24 Hours..... | 49 |
| 6.2 | MR-4 – All Troubles Cleared Within 48 Hours..... | 50 |
| 6.3 | MR-5 – All Designed Troubles Cleared Within 4 Hours..... | 52 |
| 6.4 | MR-6 – Mean Time to Restore..... | 54 |
| 6.5 | MR-7 – Repair Repeat Report Rate..... | 55 |
| 7 | Billing..... | 57 |
| 7.1 | BI-1 – Time to Provide Recorded Usage Records..... | 57 |
| 7.2 | BI-2 – Invoices Delivered Within 10 Days..... | 58 |
| 7.3 | BI-3 – Billing Accuracy – Adjustments for Errors..... | 59 |
| 7.4 | BI-4 – Billing Completeness..... | 60 |
| 8 | Overall Conclusions..... | 61 |

1 Functionality Test Results Comparison Report

1.1 Background

The Arizona §271 Operations Support Systems (OSS) Test first began with an extensive audit of Qwest's Performance Measurement reporting process. All measures, every sub-measure and every disaggregation level was eventually audited. One of the entrance criteria of the OSS functionality test was that the measures identified in Appendix C of the Master Test Plan (MTP), the functionality test measures (FTMs), had to "successfully pass" the Performance Measurement Audit (PMA) prior to testing that particular measure. A process was established to produce sections of the PMA report in phases in order to allow testing to begin for certain products or transactions as measures were reviewed and approved by all parties. Throughout the audit process, parties raised concerns that although there was general agreement that the FTMs had passed the audit to the point that Qwest appeared to perform the calculations accurately and correctly once the data were collected, there was no validation to ensure that the data contained within Qwest's adhoc dataset, upon which the calculations were based, was correct and accurate. In response to this concern, CGE&Y expanded the scope of the PMA to include the validation of Qwest's input data where possible. This validation process is described fully in the PMA – Final Report.

In addition to the PMA, section 7.3.4 of the Test Standards Document (TSD) requires that the Test Administrator (TA) perform an independent calculation of the FTMs using data captured by the Pseudo-CLEC during the test. The same measure would then be calculated using Pseudo-CLEC data contained within the Qwest adhoc files. The purpose of this requirement is to validate that the input data used by Qwest in calculating its monthly performance measure results is accurate and reflects all records submitted by a CLEC and only those records and the key data elements captured by Qwest's source systems are actually what is experienced by the CLEC.

Another important purpose of the functionality test dealing with performance measures was to provide results that complied with the Arizona § 271 Service Performance Indicator Definitions (PID) for all FTMs. This purpose was to determine the level of performance Qwest provided the Pseudo-CLEC in order to draw parity conclusions in the case of a retail analogue or make a determination as to whether benchmarks were achieved. Qwest does not provide CLECs all the data elements that are required in order to calculate most PID measures, i.e. at least one of the required data elements are not provided. . Therefore, in an effort to satisfy all TSD requirements in the most efficient and effective manner possible, CGE&Y decided to first produce PID compliant measure results based on the Qwest adhoc dataset. These results were contained in the original distribution of section 2.5 of the OSS Final Report. This allowed for timely

notification to the parties of any performance deficiencies identified during testing based on Qwest's adhoc data.

Second, CGE&Y undertook an extensive data reconciliation process where all the data elements captured by the Pseudo-CLEC through the gateway notifiers were compared to the corresponding Qwest adhoc data element. Discrepancies were noted using the Incident Work Order (IWO) process as defined in Appendix I of the TSD. This process was intended to verify that all the records submitted by the Pseudo-CLEC were captured by Qwest and contained within its source data and that the Qwest data did not contain additional or incorrect records. Any material discrepancies identified between the Pseudo-CLEC and the Qwest adhoc data resulted in CGE&Y replacing the adhoc data element with the Pseudo-CLEC data. Results of this data reconciliation process are documented in CGE&Y's Data Reconciliation Report, which is Appendix L to the OSS Final Report. Section 2.5 results were then updated to reflect the results that would have been obtained using the independently gathered Pseudo-CLEC data. It was CGE&Y's opinion that this satisfied the TSD requirement to independently calculate measures using the Pseudo-CLEC data.

Based on concerns of the Arizona Test Advisory Group (TAG) and to support the method chosen by CGE&Y to satisfy the TSD requirement, CGE&Y prepared a report that showed that the Psuedo-CLEC was not provided all the data elements required to calculate a PID compliant measure for most FTMs, i.e. at least one of the required data elements for each of those FTMs was not provided. It was CGE&Y's position that identifying one required element supported the method chosen by CGE&Y to satisfy the TSD requirement. Upon submission of this report to the TAG, a subsequent request was made by the Arizona Corporation Commission (ACC) staff and the TAG for more details concerning PID required data elements and which ones CGE&Y had relied solely on the adhoc data for calculating results. This request resulted in CGE&Y's PID Data Element Summary Report. This very detailed and complex report raised concerns from the parties that were mainly due to the format chosen for the report. It appeared that from the format CGE&Y had relied heavily on the Qwest adhoc data even when independent data was gathered and available from the Pseudo-CLEC. Due to the confusion, CGE&Y agreed to revise the appendix to the PID Data Element Summary Report, which resulted in a second version being distributed to the parties.

One of the major changes to Appendix A of the PID Data Element Summary Report between the two versions was that CGE&Y added two additional columns. One column was intended to designate for each data element whether the element was returned to the P-CLEC via the gateway notifiers and validated as part of the data reconciliation process. The second column designated that the data element was gathered by the Pseudo-CLEC as part of the functionality test by a means other than the gateway notifiers. How this element was compared to

the corresponding Qwest adhoc data element is described in the final column of the matrix. It was through evaluating this column of the matrix that it became evident to CGE&Y that several critical data elements or a reasonable alternative (e.g. LSR submitted times observed by the P-CLEC could be used as a substitute for the PID required application date in calculating OP-4) was gathered by the Pseudo-CLEC as part of testing but was not included as part of the data reconciliation process. Based on this finding, and a request from the ACC staff and its consultants, Doherty and Company, Inc. (DCI), CGE&Y agreed to produce this report where aggregated measure results will be presented for both the Pseudo-CLEC data and Qwest adhoc data in order to validate these other key data elements. This report, along with the other reports mentioned above presents a full analysis of every aspect of Qwest's performance measurement reporting process and fully satisfies all the requirements of the MTP and TSD.

1.2 Purpose

The commission staff and its consultants, DCI, have requested CGE&Y to identify aggregated measures that correspond to each of the FTMs, in which the Pseudo-CLEC gathered all the necessary data elements from the functionality test to perform an independent calculation. CGE&Y will then calculate results for the same defined measure using the raw data from the Qwest adhoc file. The purpose of this task is to compare results obtained using the Pseudo-CLEC's data with the results achieved using Qwest's adhoc to validate that the source data Qwest uses to provide its monthly performance measure results contains the correct data elements. This request consists of the following:

- ✓ Utilizing Appendix A of the PID Data Element Summary Report, prepare an alternate definition for each PID measure listed in Appendix C of the MTP, the FTMs, for which the Pseudo-CLEC independently gathered all the necessary elements to perform the calculation.
- ✓ Determine the formula to be utilized for calculating the Pseudo-CLEC results and the Qwest adhoc results for each FTM.
- ✓ Using raw data from the initial phase of the functionality test (i.e. retest data was not considered for purposes of this report unless otherwise specified), CGE&Y will perform all the required calculations and document the results in the FTRC Report.
- ✓ Issue IWOs in accordance with Appendix I of the TSD for all material differences between the Pseudo-CLEC results and the Qwest adhoc results that have not been previously identified and resolved as part of the data reconciliation process.
- ✓ Upon resolution of all IWOs, determine whether any issues identified require a revision to the functionality PID results documented in Section 2.5 of the OSS Final Report.

- ✓ Make a final determination as to the accuracy of the data contained within the Qwest adhoc files and the overall effect on Qwest's performance measurement reporting process.

1.3 Scope

The scope of this document is to make a comparison of key data elements captured by the Pseudo-CLEC during the OSS functionality test to the corresponding element contained within Qwest's adhoc dataset.

Finally, this document provides findings on the reliability of Qwest's performance measurement reporting process. These findings are presented in an objective manner supported by the results generated by the calculations made using the two different datasets.

1.4 Process

The processes used for this request are as follows:

Task 1:

Utilizing Appendix A of the PID Data Element Summary Report, prepare an alternate definition for each PID measure listed in Appendix C of the MTP, the FTMs, for which the Pseudo-CLEC independently gathered all the necessary elements to perform the calculation.

Process:

Based on the information contained in the Qwest adhoc and the data captured by the Pseudo-CLEC, determine an aggregated measure that can be calculated independently for each FTM from both data sources. Document the definition for each measure along with a general description in the Definition Section of this report.

Task 2:

Determine the formula to be utilized for calculating the Pseudo-CLEC results and the Qwest adhoc results for each FTM.

Process:

For each defined measure, identify the data elements and the formula to be used for both the calculations using the Pseudo-CLEC collected data and the Qwest adhoc data. Document the formulae for each measure under the Formula Section of this report.

Task 3:

Using raw data from the initial phase of the functionality test (i.e. retest data was not considered for purposes of this report except where specified), CGE&Y will perform all the required calculations and document the results in the FTRC Report.

Process:

Perform the independent calculations for both the Pseudo-CLEC raw data and the Qwest adhoc data. Document results for each defined measure under the Results Section of this report.

Task 4:

Prepare IWOs as appropriate and forward to Qwest for investigation.

Process:

Determine from the results achieved in Task 3 above whether differences were due to issues not previously identified and resolved. When different results are presented, compare key data fields from both data sets to identify material discrepancies. Document through the issuance of an IWO and forward to Qwest for investigation and response.

Task 5:

Make overall conclusion on the reliability of Qwest's performance measurement reporting and re-calculate the results originally provided in Section 2.5 of the OSS Final Report if required.

Process:

For any discrepancies identified in key data elements within the two data sources that are not satisfactorily explained, CGE&Y will incorporate the results originally provided in Section 2.5 of the OSS Final Report into the appropriate section of this report and perform additional calculations to reflect the impact. CGE&Y's analysis will also be provided within the findings and conclusions section of this report. Following the resolution of all IWOs, CGE&Y will document its overall finding in the Conclusion Section of this report.

One important note: This report is not intended to make any reference to measures as defined in the Arizona PID unless specifically noted. The definition contained within this report describes how the measure was calculated using Pseudo-CLEC collected data in order to compare with the Qwest adhoc raw data. The formula is intended to reflect the actual calculations made using the Pseudo-CLEC data and that made using the Qwest adhoc data. This report is intended to follow the same format as the PMA report except the measures themselves are totally different. If there is a need to address an actual PID measure within the

FTRC Report, the definition will be taken straight from the Arizona PID to avoid any confusion. No conclusions as to Qwest's performance can be derived from the measures defined within this report. The purpose of this report is to validate those results found in Section 2.5 with Pseudo-CLEC captured data. However, certain issues were identified during the analysis this resulted in a need to recalculate the Section 2.5 results. These reported results are intended to replace the performance results achieved during the functionality test that are found in Section 2.5 of the OSS Final Report.

The calculations made in the sections that follow are based on information for the same transactions (LSRs, rejects, FOCs, Jeopardies, completions, troubles, etc.) that are contained in both the Pseudo-CLEC and Qwest adhoc data. Transactions not included in both the Pseudo-CLEC and adhoc data sources were identified and discussed during the data reconciliation process. (See CGE&Y's Final Report of the Qwest OSS Test – Appendix L – Data Reconciliation Report) Only Pseudo-CLEC collected data is used in calculating the Pseudo-CLEC results for all measures unless specifically stated otherwise.

2 Gateway Availability

2.1 GA-1 – Gateway Availability – IMA-GUI

Definition

The GA-1 measure reflects the total amount of down time of the IMA-GUI interface that occurred during the scheduled available up time for the interface during the functionality test.

Formula

For Pseudo-CLEC captured data, this measurement was calculated by summing the total amount of down time observed by the Pseudo-CLEC for the IMA-GUI interface that occurred during the scheduled available hours. For Qwest adhoc data, this measurement was calculated by subtracting the total number of hours and minutes the gateway was available to CLECs from the total scheduled availability of the gateway.

Results

| Table 2.1.1 – Gateway Availability – IMA-GUI (Hours) | | |
|------------------------------------------------------|---------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| GA-1 | 5.63 | 7.90 |

Findings and Conclusions

Based on the conditions of the test, a comparison of the Pseudo-CLEC and Qwest adhoc data would not be expected to match. This is due to the following reasons: (1) the Pseudo-CLEC did not monitor the entire time the gateway was active; and (2) many outages observed by the Pseudo-CLEC were not related to gateway order processing issues. (See §2.7 of the Data Reconciliation Report for a more complete analysis of the differences in the above calculations)

2.2 GA-2 – Gateway Availability – IMA-EDI

Definition

The GA-2 measure reflects the total amount of time the IMA-EDI interface was unavailable to the Pseudo-CLEC during the scheduled available hours for the interface during the functionality test.

Formula

For Pseudo-CLEC captured data, this measurement was calculated by summing the total amount of down time observed by the Pseudo-CLEC for the IMA-EDI interface that occurred during scheduled available hours. For Qwest adhoc data, this measurement was calculated by subtracting the total number of hours and minutes the gateway was available to CLECs from the total scheduled availability of the gateway.

Results

| Table 2.2.1 – Gateway Availability – IMA-EDI (Hours) | | |
|-------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| GA-2 | 23.25 | 0.00 |

Findings and Conclusions

The Pseudo-CLEC did not experience any outages during the scheduled available hours for the EDI interface for the duration of the functionality test. Based on the conditions of the test, a comparison of the Pseudo-CLEC and Qwest adhoc data would not be expected to match because the Pseudo-CLEC did not monitor the entire time the gateway was active.

3 Pre-Order

3.1 PO-2 – Electronic Flow-through

Definition

The PO-2 measure reflects the percentage of electronically submitted Pseudo-CLEC LSRs that flow-through the electronic gateway interface to the SOP without falling out for manual intervention. This measurement is intended to report the aggregated results for all products, interfaces, and LSRs regardless of flow-through eligibility.

Formula

For Pseudo-CLEC captured data, the LSR flow-through percentage is calculated by taking the number of LSRs that flowed-through and dividing by the total number of LSRs submitted electronically by the Pseudo-CLEC that resulted in a FOC during the test period. The flow-through indicator was extracted from the adhoc data. For Qwest adhoc data, the LSR flow-through percentage is calculated by dividing the number of FOCs with a flow-through indicator (“FUL_ELG”) equal to 1 by the number of LSRs with a final status of FOC.

Results

| Table 3.1.1 – Electronic Flow-through | | |
|---------------------------------------|------------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-2 | 16.78% n=1287 | 16.78% n=1287 |

Findings and Conclusions

Results for electronic flow-through percentage using Qwest adhoc and Pseudo-CLEC data augmented with missing flow-through indicators from the adhoc data produced identical results.

3.2 PO-3 – LSR Rejection Notice Interval

Definition

The PO-3 measure reflects the average interval to provide the Pseudo-CLEC reject notifications. This measurement is intended to report the aggregated results for manual rejects via all interfaces. It is not possible to identify which rejects were rejected automatically in the Pseudo-CLEC data or identify the corresponding auto-rejects in the adhoc data. Therefore, a comparison of adhoc auto-rejects would not consider the same rejects, and would not be an “apples-to-apples” comparison.

Formula

For Pseudo-CLEC captured data, the rejection notice interval is calculated by the difference between the LSR submission date and time and the reject receipt date and time for manual rejects. This measurement is calculated by summing the rejection intervals for all Pseudo-CLEC LSR submissions and dividing by the total number of Pseudo-CLEC LSR submissions rejected. For Qwest adhoc data, the rejection interval is calculated by the difference of the received date and time (“RCVDAT”) and the status date and time (“STAT_DT”) for CRM records with a status of “Rejected.” This measurement is calculated by summing all manual rejection intervals for the Pseudo-CLEC during the test period and dividing by the total number of LSRs rejected manually.

Results

| Table 3.2.1 – LSR Rejection Notice Interval (Hours:minutes:seconds) | | |
|------------------------------------------------------------------------|-------------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-3 | 29:56:39 n=208 | 29:58:55 n=208 |

Findings and Conclusions

Results for LSR rejection notice interval using adhoc and Pseudo-CLEC data indicate a difference of only 2 minutes, which can be explained by the different data elements considered by the Pseudo-CLEC and Qwest (i.e., LSR submission time vs. LSR receipt time, and reject notification receipt time vs. reject status time). CGE&Y finds this time difference reasonable, therefore, CGE&Y finds that the Qwest adhoc data used to calculate the PO-3 PID measure for LSR

rejection notice interval accurately reflects the manual reject intervals observed by the Pseudo-CLEC during the functionality test.

3.3 PO-4 – LSRs Rejected

Definition

The PO-4 measure reflects the percentage of Pseudo-CLEC submitted LSRs that were rejected. This measurement is intended to report the aggregated results for auto and manual rejects via EDI. The Pseudo-CLEC did not capture all auto rejects via GUI, therefore, a comparison of GUI results would not be appropriate. (See Appendix A of the Arizona §271 Performance Indicator Definitions (PID) Data Element Summary Report)

Formula

For Pseudo-CLEC captured data, the percentage of LSRs rejected is calculated by dividing the number of EDI LSR submissions that were rejected by the total number of EDI LSR submissions by the Pseudo-CLEC during the test period that resulted in a FOC or a reject. For Qwest adhoc data, the percentage of LSRs rejected is calculated by the number of CRM records with a status of “Rejected” divided by the total number of records with a status of “Rejected” or “Issued FOC.”

Results

| Table 3.3.1 – LSRs Rejected | | |
|------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-4 | 63.91% n=2214 | 63.66% n=2240 |

Findings and Conclusions

Performance measurement calculations for the percentage of EDI LSRs rejected using adhoc and Pseudo-CLEC data indicate a difference of only 0.25 percent. The difference in denominators between the Adhoc Results and Pseudo-CLEC Results was explained and documented during the data reconciliation process. (See §2.5 of Appendix L – Data Reconciliation Report to CGE&Y’s Final Report of the Qwest OSS Test; *See also*, AZIWO1210) Therefore, considering the results as shown above along with the resolution of AZIWO1210, CGE&Y finds

that the Qwest adhoc data for the percentage of EDI LSRs rejected accurately reflects the EDI LSR rejection rate observed by the Pseudo-CLEC during the functionality test.

3.4 PO-5 – Firm Order Confirmation Interval

Definition

The PO-5 measure reflects the average FOC interval aggregated for all products, interfaces, and all FOCs regardless of whether the LSR was fully electronic, electronic/manual, or failed flow-through.

Formula

For Pseudo-CLEC captured data, the FOC interval is calculated by the difference between the LSR submission date and time and the FOC received date and time. This measurement is calculated by summing the FOC intervals for the Pseudo-CLEC and dividing by the total number of FOCs during the functionality test. For Qwest adhoc data, the FOC interval is calculated by taking the difference between the status date and time and received date and time for those records with a status of “Issued FOC.” This measurement is calculated by summing all the FOC intervals and dividing by the number of FOCs provided to the Pseudo-CLEC during the functionality test.

Results

| Table 3.4.1 – Firm Order Confirmation Interval (Hours:minutes:seconds) | | |
|-------------------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-5 | 17:51:45 n=1287 | 17:57:07 n=1287 |

Findings and Conclusions

Results for average FOC intervals using adhoc and Pseudo-CLEC data indicate a difference of just over 6 minutes. This difference can be accounted for by the difference in data elements used for the calculation (i.e., LSR submission time versus received time). Therefore, CGE&Y finds that the Qwest adhoc data for FOC intervals used to calculate results for the PID PO-5 measure accurately reflects the FOC intervals observed by the Pseudo-CLEC during the functionality test.

3.5 PO-6 – Work Completion Notification Timeliness

Definition

The PO-6 measure reflects the average interval to provide the Pseudo-CLEC electronic notification of order completion from the time an order is posted as complete in the Service Order Processor (SOP). This measurement is intended to report results for completion notifications provided via EDI.

Formula

For Pseudo-CLEC captured data, completion notification interval is calculated by the difference between the time the status of an order is updated to “order completed” (transmitted to the Pseudo-CLEC via the status update indicator) and the time the SOC notification is received by the Pseudo-CLEC. This measurement is calculated by summing the completion notification intervals for the Pseudo-CLEC and dividing by the total number of completion notifications via EDI. For Qwest adhoc data, the completion notification interval is calculated by first determining the difference between the date and time the order is posted as complete (“POST_DT”) and the date and time the notification is sent to the Pseudo-CLEC (“SENT_DT”) for all records in the WNOT adhoc data. Next, the intervals are summed and divided by the total number of completion notifications transmitted via EDI. For both Pseudo-CLEC and Qwest adhoc data, intervals of less than 0 and SOC’s associated with the July 9, 2001 manual clean-up have been excluded.

Results

| Table 3.5.1 – Work Completion Notification Timeliness (Hours:minutes:seconds) | | |
|--------------------------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-6 | 1:04:23 n=199 | 1:25:16 n=199 |

Findings and Conclusions

Results for EDI work completion notification timeliness using adhoc and Pseudo-CLEC data indicate a difference of 0:20:53. It appears that the POST_TM field in the adhoc WNOT data marks an event somewhat subsequent to the generation of the last status update sent to the Pseudo-CLEC indicating “Order completed”.

When CGE&Y calculated the interval using the LSR status update “Request Completed,” results for the Pseudo-CLEC were much closer to Qwest adhoc results (1:02:08).

In 12 cases, which were excluded from the above analysis, the SOC notification was received by the Pseudo-CLEC prior to the order status being updated to reflect the order was complete. CGE&Y issued AZIWO1216 to document this finding. Qwest’s response to this IWO indicates that for 11 of these 12 instances there was a delay in the notification to the Pseudo-CLEC that the physical work was completed resulting in receiving the SOC prior to notification that the work was complete. The last instance was explained to CGE&Y’s satisfaction upon additional investigation. CGE&Y finds that Qwest is calculating PO-6 in accordance with the PID since the physical work had actually been completed as noted in the adhoc database. However, CGE&Y recommends that the status update include the date and time the physical work is completed in WFA in order for the CLEC to reconcile its own performance measurement results.

3.6 PO-7 – Billing Completion Notification Timeliness

Definition

The PO-7 measure reflects percentage of billing completion notifications that are transmitted to the Pseudo-CLEC within five business days of posting in the SOP. This measurement is intended to report results for completion notifications provided via EDI.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of status update indicators indicating “Posted to be billed” (i.e., billing notifications) within 5 days of the order completion date by the total number of billing notifications received by the Pseudo-CLEC. For Qwest adhoc data, this measurement is calculated by dividing the number of billing notifications with a notify date within 5 days of the completion date by the total number of billing notifications transmitted to the Pseudo-CLEC.

Results

| Table 3.6.1 – Billing Completion Notification Timeliness | | |
|-----------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-7 | 94.68% n=94 | 94.68% n=94 |

Findings and Conclusions

Results for billing completion notification timeliness using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that the Qwest adhoc data for billing completion notifications accurately reflects the billing notification intervals observed by the Pseudo-CLEC during the functionality test.

3.7 PO-8 – Jeopardy Notice Interval

Definition

The PO-8 measure reflects the average interval to provide the Pseudo-CLEC with notification that an order is in jeopardy. This measurement is intended to report the aggregated results for all products.

Formula

For Pseudo-CLEC captured data, the jeopardy notice interval is calculated by taking the difference between the due date provided on the first FOC and the first jeopardy receipt date. This measurement is calculated by summing all the jeopardy notice intervals and dividing by the total number of jeopardies received during the functionality test. For Qwest adhoc data, the jeopardy notice interval is calculated by taking the difference between the jeopardy sent date and the order due date. This measurement is calculated by summing the jeopardy notice intervals and dividing by the total number of jeopardies on Pseudo-CLEC orders during the functionality test.

Results

| Table 3.7.1 – Jeopardy Notice Interval (Days) | | |
|------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-8 | 4.00 n=5 | 3.80 n=5 |

Findings and Conclusions

Results for jeopardy notice intervals using adhoc and Pseudo-CLEC data indicate a difference of 0.2 business days. In one case, Pseudo-CLEC data indicated the jeopardy was received one day later than indicated by the Qwest adhoc data. CGE&Y created AZIWO1220 detailing this issue. Qwest responded to this IWO stating that the customer service representative entered the jeopardy date in RTT without actually faxing the jeopardy notice. The jeopardy notice was sent the next day as observed by in the Pseudo-CLEC captured data.

The following PO-8 results present performance measurement calculations for the Pseudo-CLEC using the jeopardy date present in RSOR and the jeopardy received date captured by the Pseudo-CLEC. For each product result, CGE&Y provides a parity/disparity finding where sufficient data are available. In addition, CGE&Y presents aggregate CLEC performance results and statistical findings based on the jeopardy date available in RSOR. These results are not intended to match those presented in §2.5 of the Final Functionality Report. These performance results are based on more recent data. In addition, CGE&Y has removed MSA and Zone disaggregations to increase sample size and to focus on the difference between the use of the adhoc jeopardy date and Pseudo-CLEC captured jeopardy date.

The following table presents aggregated PO-8 PID results for the Pseudo-CLEC, commercial CLECs, and Qwest retail jeopardy notice intervals during the original phase of the functionality test. Only those products that demonstrate a difference in calculated results using the adhoc jeopardy date and Pseudo-CLEC captured jeopardy date are presented.

| Table 3.7.2 – PO-8 – Jeopardy Notice Interval (A/MA) | | | | | | | |
|------------------------------------------------------|-------------------------------------|----------------------------------|----------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Product | Standard | Pseudo-CLEC Results (Adhoc) | Pseudo-CLEC Results (P-CLEC) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (Adhoc) | Pseudo-CLEC vs. Standard (P-CLEC) | Aggregate CLEC vs. Standard |
| Unbundled Loop and Number Portability | Log: 2.48 Arith: 5.72 n: 8387 | Log: 2.46 Arith: 2.50 n: 2 | Log: 2.00 Arith: 2.00 n: 2 | Log: 2.99 Arith: 4.35 n: 171 | Log: Insuff Evid d=0.006, r0=.497, rd=.346 Insuff Evid d=0.175, r0=.403, rd=.438 | Log: Insuff Evid d=0.159, r0=.411, rd=.429 Log: Insuff Evid d=0.202, r0=.388, rd=.453 | Log: Parity d=-.145, rd=.000 Arith: Parity d=0.075, rd=.003 |

The order identified in AZIWO1220 was an unbundled loop. Results using the Pseudo-CLEC captured jeopardy date served to reduce the average jeopardy notice interval from that reported in Qwest’s published results. CGE&Y has closed AZIWO1220 due to human error. CGE&Y verified Qwest has modified its delayed order procedures to ensure that the jeopardy notice is transmitted to

the CLEC before it is entered into RTT for performance measurement reporting. Qwest issued an MCC and conducted follow-up meetings to ensure the implementation of these new procedures. Under these new procedures, the service representative issues the jeopardy notice to the CLEC, then logs the activity in RTT which auto-populates the date field. Furthermore, Qwest maintains a report of all jeopardies created that have not been sent out. This prevents the situation described in AZIWO1220 from recurring as this jeopardy would have appeared on this report and been addressed prior to resulting in inaccurate performance measurement reporting.

3.8 PO-9 – Timely Jeopardy Notices

Definition

The PO-9 measure reflects the percentage of Pseudo-CLEC service orders that received jeopardy notification in advance when the scheduled due date was missed. This measure is intended to report the aggregated results for all products.

Formula

For Pseudo-CLEC data, this measurement is calculated by dividing the number of Pseudo-CLEC orders that are not installed by the scheduled due date indicated on the FOC and received jeopardy notification before the due date by the total number Pseudo-CLEC orders that are not installed by the scheduled due date. For the Qwest adhoc data, this measurement is calculated by dividing the number of Pseudo-CLEC orders that were not installed by the scheduled due date but received jeopardy notification in advance of the due date by the total number of Pseudo-CLEC orders that were not installed by the scheduled due date.

Results

| Table 3.8.1 – Timely Jeopardy Notices | | |
|----------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| PO-9 | 4.07% n=123 | 5.13% n=156 |

Findings and Conclusions

Results for timely jeopardy notices using Qwest adhoc and Pseudo-CLEC data indicate a difference of 1.06 percent. The large difference in the number of Pseudo-CLEC orders that missed the installation due date explains the difference in the two results. CGE&Y issued AZIWO2130 to address the cases where the due date recorded in the Pseudo-CLEC data differed from the due date recorded in the Qwest adhoc data. (See § 4.1, OP-3 discussion) Qwest's response to this IWO indicated that for the majority of cases identified, manual input errors caused the due date indicated on the FOC to reflect the desired due date on the LSR rather than the standard interval due date entered on the service order. Qwest indicated in interviews conducted with CGE&Y that CRM auto-populated several fields in the FOC with information contained in the LSR. This included the CLEC requested due date. However, it is the responsibility of the customer service representative to overwrite the due date field in the FOC to reflect the standard interval due date when different from the desired due date on the LSR. From the Pseudo-CLEC's perspective, these manual input errors resulted in the understatement of the number of installation commitments missed for the Pseudo-CLEC. However, advance jeopardy notifications were received on 3 of the orders not counted as a missed commitment by Qwest adhoc data. The net effect of the error was to reduce slightly the PO-9 results presented above from the Pseudo-CLEC's perspective. However, Qwest's contention is that the due date provided via the FOC is not the original due date, which is contained in the service order, and thus, that its published performance measure results accurately reflect its performance in meeting installation due dates. The PID does not specify whether the appropriate due date for measurement calculations is the due date transmitted via the FOC or the due date contained on the service order, therefore, CGE&Y cannot conclude that results published in Qwest's monthly results are non-compliant with the PID. CGE&Y does recognize that the transmission of an incorrect due date can place CLECs at a disadvantage and could severely impact the CLEC's relation to its end-user customer.

For comparison purposes, CGE&Y recalculated the results for PO-9 PID, originally presented in §2.5 of the Final Functionality Report, using the Pseudo-CLEC captured due date for the 111 cases identified in AZIWO2130 to reflect Qwest's performance for installing service on or before the scheduled due date transmitted via the FOC. These results are not intended to provide definitive parity/disparity conclusions but are intended to reflect Qwest's performance in providing timely jeopardy notification from the Pseudo-CLEC's perspective to show the impact on performance measurement results caused by the due date discrepancy.

The following PO-9 PID results present performance measurement calculations for the Pseudo-CLEC using the due date present in RSOR ("SODD") and the due date provided on the FOC ("FOC DD"), captured in the Pseudo-CLEC data. For

each product result, CGE&Y provides a parity/disparity finding where sufficient data are available for informational purposes. In addition, CGE&Y presents aggregate CLEC performance results and statistical findings based on the due date available in RSOR. These results are not intended to match those presented in §2.5 of the Final Functionality Report. These performance results are based on more recent data. In addition, CGE&Y has removed MSA and Zone disaggregations to increase sample size and to focus on the difference between the use of the RSOR due date and Pseudo-CLEC captured due date.

The following table presents aggregated PO-9 PID results for the Pseudo-CLEC, commercial CLECs, and Qwest retail timely jeopardy notices during the original phase of the functionality test. Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

| Table 3.8.2 – PO-9 – Timely Jeopardy Notices (A/MA) | | | | | | | |
|------------------------------------------------------------|--------------------|-----------------------------------|-------------------------------------|-------------------------------|----------------------------------------|------------------------------------------|------------------------------------|
| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
| Non-Designed | 33.30% n: 18769 | 37.04% n: 27 | 27.03% n: 37 | 25.98% n: 358 | Parity d=-.039, rd=.019 | Indet. -> P d=0.068, rd=.175 | Disparity d=0.080, r0=.002 |
| UNE-P (POTS) | 33.30% n: 18769 | 0.00% n: 7 | 0.00% n: 11 | 8.60% n: 93 | Disparity d=0.615, r0=.031 | Disparity d=0.615, r0=.010 | Disparity d=0.318, r0=.000 |

Based on the results presented above, calculations using the due date as captured by the Pseudo-CLEC indicate that Qwest missed more installation commitments than do calculations using the RSOR due date. Moreover, the Pseudo-CLEC did not receive advance jeopardy notice for any of these PO-9 eligible missed installation commitments. However, CGE&Y's main concern is to ensure that the FOC and the service order reflect the same due date, as there is potentially a severe impact on a CLEC's relation to its end-user customer when a service installation commitment date is not met.

Qwest has implemented several quality control mechanisms to ensure the due date transmitted via the FOC is identical to that which is entered into the SOP. On a monthly basis, Qwest's quality review team compares 10% of all due dates. In addition, 100% of all due dates are reviewed for a one day period each week. Qwest has also implemented a due date GUI which includes a database containing due dates based on the Service Interval Guide (SIG). Service Representatives are personally coached when input errors are discovered.

Although not all of the above quality control procedures were in place during the retest period, CGE&Y observed significant improvement in the reduction of due date discrepancies. CGE&Y analyzed Pseudo-CLEC data for the retest period and compared the FOC due dates with the due dates for the corresponding orders contained in RSOR. The results of this analysis indicate that the number of orders where the Pseudo-CLEC captured due date differed from the RSOR due date were significantly reduced. During the retest, there were only 5 cases where the FOC indicated a due date different than the due date contained in RSOR. Based on Qwest's improved quality control procedures and results of retest data, CGE&Y has closed AZIWO2130 and finds that parties can rely on the accuracy of Qwest's performance measurement reporting to draw conclusions as to the level of service Qwest provides in giving timely notification to CLECs when due dates are in jeopardy.

4 Ordering and Provisioning

4.1 OP-3 – Installation Commitments Met

Definition

The OP-3 measure reflects the percentage of Pseudo-CLEC service orders that are completed by the scheduled due date. This measurement is intended to report the aggregated results for all products whether dispatched or not for all LSRs submitted during the initial phase of the functionality test.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of Pseudo-CLEC service orders that were completed on or before the due date indicated on the original FOC by the total number of service order completions. For Qwest adhoc data, this measurement is calculated by dividing the number of Pseudo-CLEC service orders that were completed on or before the due date by the total number of Pseudo-CLEC service order completions.

Results

| Table 4.1.1 – Installation Commitments Met | | |
|--------------------------------------------|-----------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| OP-3 | 87.45% n=980 | 84.08% n=980 |

Findings and Conclusions

Results for installation commitments met using adhoc and Pseudo-CLEC data indicate a difference due to discrepancies in the due date between the two data sources. There were 48 cases where the Qwest adhoc data indicated that the service order was completed by the scheduled due date, but the Pseudo-CLEC data indicated the due date was missed. Similarly, there were 15 cases where Pseudo-CLEC data indicated that the service order was completed by the scheduled due date, but the Qwest adhoc data indicated that the due date was missed. In total, the Pseudo-CLEC recorded due date did not match the due date included in Qwest's RSOR adhoc data 111 times. CGE&Y issued AZIWO2130 on this subject. Qwest's response to this IWO indicated that for the majority of

cases identified, manual input errors caused the due date indicated on the FOC to reflect the desired due date on the LSR rather than the standard interval due date entered on the service order. Qwest indicated in interviews conducted with CGE&Y that CRM auto-populated several fields in the FOC with information contained in the LSR. This included the CLEC requested due date. However, it is the responsibility of the customer service representative to overwrite the due date field in the FOC to reflect the standard interval due date when different from the desired due date on the LSR. From the Pseudo-CLEC's perspective, these manual input errors resulted in the overstatement of the number of installation commitments met for the Pseudo-CLEC. The net effect of the error was to increase the OP-3 results for the Pseudo-CLEC. CGE&Y finds that this error would affect commercial CLEC results to a lesser extent due to higher flow-through rates.

Qwest's position is that the due date provided via the FOC is not the original due date, which is contained in the service order, and thus, that its published performance measure results accurately reflect its performance in meeting installation due dates. The PID does not specify whether the appropriate due date for measurement calculations is the due date transmitted via the FOC or the due date contained on the service order, therefore, CGE&Y cannot conclude that results published in Qwest's monthly results are non-compliant with the PID. CGE&Y does recognize that the transmission of an incorrect due date can place CLECs at a disadvantage and could severely impact the CLEC's relation to its end-user customer.

For comparison purposes, CGE&Y recalculated the results for OP-3 PID, originally presented in §2.5 of the Final Functionality Report, using the Pseudo-CLEC captured due dates for the 111 cases identified in AZIWO2130 to reflect Qwest's performance for installing service by the scheduled due date transmitted via the FOC. These results are not intended to provide definitive parity/disparity conclusions, but rather to provide Qwest's performance in meeting installation due dates from the Pseudo-CLEC's perspective.

The following OP-3 PID results present performance measurement calculations for the Pseudo-CLEC using the due date present in RSOR ("SODD") and the due date provided on the FOC ("FOC DD"), captured in the Pseudo-CLEC data. For each product result, CGE&Y provides a parity/disparity finding where sufficient data are available for informational purposes. In addition, CGE&Y presents aggregate CLEC performance results and statistical findings based on the due date available in RSOR. These results are not intended to match those presented in §2.5 of the Final Functionality Report. These performance results are based on more recent data. In addition, CGE&Y has removed MSA and Zone disaggregations to increase sample size and to focus on the difference between the use of the RSOR due date and Pseudo-CLEC captured due date.

The following table presents aggregated dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail installation commitments met during the original phase of the functionality test. (OP-3A&B) Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

| Table 4.1.2 – OP-3A&B – Installation Commitments Met (Percent) - Dispatched (Y/MA) | | | | | | | |
|-----------------------------------------------------------------------------------------------|---------------------|-----------------------------------|-------------------------------------|-------------------------------|----------------------------------------|------------------------------------------|------------------------------------|
| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
| Business | 90.50% n: 20161 | 89.69% n: 97 | 88.78% n: 98 | 79.18% n: 269 | Parity d=0.013, rd=.012 | Parity d=0.028, rd=.021 | Disparity d=0.160, r0=.000 |
| Residential | 95.16% n: 111972 | 90.00% n: 50 | 88.89% n: 54 | 95.53% n: 3087 | Disparity d=0.100, r0=.045 | Disparity d=0.118, r0=.016 | Parity d=-.009, rd=.000 |
| UNE-P (POTS) | 94.45% n: 132133 | 95.41% n: 109 | 88.07% n: 109 | 91.03% n: 368 | Parity d=-.022, rd=.003 | Disparity d=0.115, r0=.002 | Parity d=0.066, rd=.004 |

For all products shown, calculations using the due date as captured by the Pseudo-CLEC indicate that Qwest met fewer dispatched installation commitments than do calculations using the RSOR due date. Pseudo-CLEC UNE-P results indicate parity when calculated using the RSOR due date. However, Pseudo-CLEC UNE-P results indicate disparity when calculated using the Pseudo-CLEC due date. In §2.5 of the Final Functionality Report, CGE&Y found that Qwest provided parity service for UNE-P. Based on the recalculation of results presented herein, CGE&Y finds that from the Pseudo-CLEC's perspective Qwest failed to meet Pseudo-CLEC dispatched UNE-P installation commitments at parity levels. CGE&Y issued AZIWO2132 in response to this finding.

The following table presents aggregated non-dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail installation commitments met during the original phase of the functionality test. (OP-4C) Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

Table 4.1.3 – OP-3C – Installation Commitments Met (Percent) – Non-Dispatched (N/MA)

| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
|--------------|---------------------|----------------------------|------------------------------|------------------------|---------------------------------|-----------------------------------|---------------------------------------------|
| Business | 99.00% n: 30789 | 100.0% n: 163 | 96.93% n: 163 | 98.64% n: 367 | Parity d=-.100, rd=.001 | Disparity d=0.076, r0=.004 | Parity d=0.017, rd=.000 |
| Centrex 21 | 98.58% n: 8443 | 100.0% n: 34 | 91.18% n: 34 | 100.0% n: 34 | Indet. -> P d=-.120, rd=.060 | Disparity d=0.182, r0=.000 | Indet. -> P d=-.120, rd=.060 |
| PBX | 98.68% n: 607 | 100.0% n: 23 | 91.30% n: 23 | 100.0% n: 5 | Indet. -> P d=-.115, rd=.108 | Disparity d=0.184, r0=.001 | Insuff Evid d=-.115, r0=.602, rd=.279 |
| Residential | 99.82% n: 634799 | 97.58% n: 207 | 92.45% n: 212 | 99.39% n: 12540 | Disparity d=0.113, r0=.000 | Disparity d=0.235, r0=.000 | Parity d=0.035, rd=.000 |
| UNE-P (POTS) | 99.78% n: 665589 | 99.55% n: 222 | 95.58% n: 226 | 98.70% n: 3547 | Parity d=0.020, rd=.006 | Disparity d=0.165, r0=.000 | Parity d=0.067, rd=.000 |

For all products shown, calculations using the due date as captured by the Pseudo-CLEC indicate that Qwest met fewer dispatched installation commitments than do calculations using the RSOR due date. Results using the Qwest RSOR due date indicated parity for Business, Centrex 21, PBX and UNE-P. However, once CGE&Y adjusted calculations to reflect the due date transmitted via the FOC, results indicated disparity for all products shown. There was a significant drop in performance for each product. Although residential results were originally in disparity, the due date correction increased the severity of this disparity finding. In §2.5 of the Final Functionality Report, CGE&Y found that Qwest provided parity service for Business, Centrex 21, and UNE-P, and was leaning towards parity for PBX. Based on the recalculation of results presented herein, CGE&Y finds that from the Pseudo-CLEC's perspective Qwest failed to meet Pseudo-CLEC non-dispatched Business, Centrex 21, PBX, and UNE-P installation commitments at parity levels. CGE&Y issued AZIWO2132 in response to this finding.

The following table presents aggregated designed results for the Pseudo-CLEC, commercial CLECs, and Qwest retail installation commitments met during the original phase of the functionality test. (OP-4D&E) Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

Table 4.1.4 – OP-3D&E – Installation Commitments Met (Percent) – Interval Zones 1 & 2 (A/HA)

| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
|-------------------------|------------------|----------------------------|------------------------------|------------------------|---------------------------------|-----------------------------------|-----------------------------|
| DS0 | 88.61% n: 237 | 100.0% n: 60 | 95.00% n: 60 | | Parity d=-.344, rd=.000 | Parity d=-.119, rd=.002 | |
| Unbundled 2-Wire Analog | 90.0% | 100.0% n: 92 | 94.57% n: 92 | 99.42% n: 7641 | Pass | Pass | Pass |

For DS0 and unbundled 2-wire analog loops, calculations using the due date as captured by the Pseudo-CLEC indicate that Qwest met fewer dispatched installation commitments than do calculations using the RSOR due date. However, results indicate that Qwest is still meeting the parity/benchmark standard for both.

Based on the results of performance calculations using the due date transmitted via the FOC presented above, CGE&Y finds that Qwest's transmission of an incorrect due date via the FOC significantly lowered Qwest's OP-3 performance from the Pseudo-CLEC's perspective. However, CGE&Y's main concern is to ensure that the FOC and the service order reflect the same due date, as there is potentially a severe impact on a CLEC's relation to its end-user customer when a service installation commitment date is not met.

Qwest has implemented several quality control mechanisms to ensure the due date transmitted via the FOC is identical to that which is entered into the SOP. On a monthly basis, Qwest's quality review team compares 10% of all due dates. In addition, 100% of all due dates are reviewed for a one day period each week. Qwest has also implemented a due date GUI which includes a database containing due dates based on the SIG. Service Representatives are personally coached when input errors are discovered.

Although not all of the above quality control procedures were in place during the retest period, CGE&Y observed significant improvement in the reduction of due date discrepancies. CGE&Y analyzed Pseudo-CLEC data for the retest period and compared the FOC due dates with the due dates for the corresponding orders contained in RSOR. The results of this analysis indicate that the number of orders where the Pseudo-CLEC captured due date differed from the RSOR due date were significantly reduced. During the retest, there were only 5 cases where the FOC indicated a due date different than the due date contained in RSOR. Based on the results of retest data which supports the positive effect of Qwest's

improved quality control procedures, CGE&Y has closed AZIWO2130. CGE&Y finds that parties can rely on the accuracy of Qwest's performance measurement reporting to draw conclusions as to the level of service Qwest provides to CLECs in meeting committed installation due dates. CGE&Y has also closed AZIWO2132 and recommends the parties review future commercial performance results to determine if Qwest is providing non-discriminatory service in meeting due dates.

4.2 OP-4 – Installation Interval

Definition

The OP-4 measure indicates the average interval (in business days) for Qwest to install service for the LSRs submitted by the Pseudo-CLEC. This measurement is intended to report the aggregated results for all products whether dispatched or not for all LSRs submitted during the initial phase of the functionality test.

Formula

For Pseudo-CLEC captured data, the installation interval is calculated by taking the difference between the start date and the completion date. The PID defines the start date as the date Qwest receives a complete and accurate LSR (i.e., application date). However, the Pseudo-CLEC does not capture this data element. Pseudo-CLEC data contains two data elements that are similar to the application date, but not equal in all instances. For this reason, CGE&Y produced two sets of results for installation interval calculations. One is based on the LSR submission date and the other uses the FOC date as the alternative for the Qwest equivalent application date. The measure is then calculated by summing the installation intervals for Pseudo-CLEC service orders and dividing by the total number of Pseudo-CLEC service order completions. For Qwest adhoc data, the installation interval is calculated by taking the difference between the application date and the completion date. This measure is calculated by summing the installation intervals for Pseudo-CLEC orders and dividing by the total number of Pseudo-CLEC service order completions.

Results

| Table 4.2.1 – Installation Interval | | | |
|-------------------------------------|---------------|--------------------------------|--------------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results (LSR Date) | Pseudo-CLEC Results (FOC Date) |
| OP-4 | 4.55 n=980 | 5.27 n=980 | 3.92 n=980 |

Findings and Conclusions

Results for average installation interval using Qwest adhoc data was 0.77 business days shorter than results calculated from Pseudo-CLEC data using the LSR submission date. The same adhoc results were 0.63 days longer than results calculated from Pseudo-CLEC data using the FOC date. As stated earlier, the application date used by Qwest for its calculation is not equivalent to any data element captured by the Pseudo-CLEC. According to the PID, the application date is the time Qwest receives a complete and accurate LSR from the CLEC. Thus, in cases where a CLEC submits an LSR that requires manual handling and correction of soft errors that do not elicit a rejection notice, the application date is considered the date and time when the LSR is ready to be processed error free. The PID compliant application date, therefore, would be a date and time equal to or later than the LSR submission date captured by the Pseudo-CLEC, but should not be later than the FOC date. CGE&Y's results using both the LSR submission date and FOC date confirms this assumption. Using the last LSR submission date prior to the first FOC produces an interval longer than that reported by Qwest, however, using the FOC date produces an interval shorter than that produced by using the Qwest RSOR application date.

The PID definition for application date is the date and time Qwest receives a complete and accurate LSR from the CLEC. The PID also provides for the application date being the next business day when the LSR is submitted after a specific cut off time. However, in its response to data request DR-512 submitted by CGE&Y, Qwest stated that it uses the “date of the entry of the SO into the SOP” for the application date in RSOR. Thus, CGE&Y finds that Qwest procedures for capturing the application date do not guarantee that it will be compliant with the PID as stated above.

CGE&Y's investigation of the 980 completed service orders considered in the above calculation shows that in 5 instances the application date was before the LSR submission date, and in 3 instances the application date was after the FOC date. CGE&Y issued AZIWO1217 for these eight orders, as the application dates appeared to be out of bounds as described above. Qwest's response to this IWO

indicated that manual errors were responsible for the majority of these incorrect application dates.

CGE&Y is able to assess that for 755 orders, Qwest assigned the correct application date since the application date in RSOR matched the LSR submission date in the Pseudo-CLEC data. However, for the remaining 253 orders, the application date in RSOR was later than the LSR submission date in the Pseudo-CLEC data. CGE&Y is unable to assess whether Qwest correctly assigned the application date in these cases. CGE&Y recognizes that it is possible for the application date to occur later than the LSR submission date. However, there is no evidence to support or refute that the application date recorded in Qwest's RSOR data is PID compliant for these 253 orders.

CGE&Y is unable to determine the true PID compliant application date for orders that experienced soft errors which did not elicit a reject. Moreover, CGE&Y is unable to determine if an LSR experienced a soft error resulting in the PID compliant application date being later than the LSR submission date. In cases where the PID application date is earlier than the service order entry date, the net effect of Qwest's use of the service order entry date into the SOP as the application date would be to decrease the provisioning interval for the Pseudo-CLEC. CGE&Y finds that this would affect commercial CLEC results in a similar fashion for those orders where the service order entry date does not equal the PID compliant application date. Due to the differing ordering processes on the retail side, the range of the potential interpretation for the application date is not expected to be present in near the volumes that exist for the Pseudo-CLEC. Therefore, if this problem were present in retail data at all, it would be on a much smaller scale than in wholesale data. Thus, Qwest's reported results during the original functionality test for OP-4 may be biased towards unwarranted parity findings.

For comparison purposes, CGE&Y has recalculated the results for OP-4 PID, originally presented in §2.5 of the Final Functionality Report, using the LSR submission date as the application date. However, where the LSR submission was after 3:00 PM for designed service orders or after 7:00 PM for non-designed service orders, CGE&Y used the next business day as the application date unless Qwest's RSOR data used the LSR submit date. CGE&Y does not suggest that the use of the LSR submission date as the application date is compliant with the current PID but presents these results as they represent the "worst-case scenario." The true application date for the 253 orders in question could not be before the LSR submission date, but may actually be after it. Therefore, these results may be slightly longer than results calculated from the true PID application date.

The following tables present PID performance measurement calculations for the Pseudo-CLEC using the application date present in RSOR and the LSR

submission date available in the Pseudo-CLEC captured data. For each product result, CGE&Y provides a parity/disparity finding where sufficient data are available. In addition, for comparison purposes, CGE&Y presents aggregate CLEC performance results and statistical findings based on the application date in RSOR. These results will not match those presented in §2.5 of the Final Functionality Report because these performance results are based on more recent raw data. In addition, CGE&Y has removed MSA and Zone disaggregations from consideration to increase sample size and to focus on the difference between the use of the RSOR application date and Pseudo-CLEC captured LSR submission date.

The following table presents aggregated dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail during the original phase of the functionality test. (OP-4A&B PID) Only those products that demonstrate a difference in calculated results using the RSOR application date and Pseudo-CLEC captured LSR submission date are presented. CGE&Y found that those disaggregations that did not experience differences in results were due to very low volumes or random chance and not specific to certain products or services.

Table 4.2.2 – OP-4A&B – Installation Interval - Dispatched (Y/MA)

| Product | Standard | Pseudo-CLEC Results (Appl. Date) | Pseudo-CLEC Results (LSR Date) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (Appl. Date) | Pseudo-CLEC vs. Standard (LSR Date) | Aggregate CLEC vs. Standard |
|--------------|---------------------------------------|------------------------------------|------------------------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Business | Log: 3.82 Arith: 5.87 n: 20153 | Log: 4.70 Arith: 5.47 n: 97 | Log: 4.99 Arith: 5.74 n: 98 | Log: 5.70 Arith: 7.42 n: 269 | Log: Disparity d=0.243, r0=.008 Arith: Parity d=-.041, rd=.001 | Log: Disparity d=0.317, r0=.001 Arith: Parity d=-.013, rd=.002 | Log: Disparity d=0.476, r0=.000 Arith: Disparity d=0.162, r0=.004 |
| ISDN BRI | Log: 3.42 Arith: 6.25 n: 253 | Log: 3.00 Arith: 3.00 n: 1 | Log: 10.00 Arith: 10.00 n: 1 | Log: 5.00 Arith: 5.00 n: 1 | Log: Insuff Evid d=-.134, r0=.553, rd=.338 Insuff Evid d=-.249, r0=.598, rd=.297 | Log: Indet. -> DP d=1.162, r0=.123 Insuff Evid d=0.287, r0=.387, rd=.501 | Log: Insuff Evid d=0.399, r0=.345, rd=.545 Arith: Insuff Evid d=-.096, r0=.538, rd=.352 |
| Residential | Log: 4.31 Arith: 5.58 n: 111963 | Log: 4.25 Arith: 5.34 n: 50 | Log: 5.37 Arith: 7.17 n: 54 | Log: 2.35 Arith: 3.20 n: 3087 | Log: Parity d=-.022, rd=.015 Arith: Parity d=-.038, rd=.011 | Log: Disparity d=0.327, r0=.008 Arith: Disparity d=0.254, r0=.031 | Log: Parity d=-.862, rd=.000 Arith: Parity d=-.382, rd=.000 |
| UNE-P (POTS) | Log: 4.23 Arith: 5.62 n: 132116 | Log: 3.56 Arith: 3.68 n: 109 | Log: 3.73 Arith: 3.79 n: 109 | Log: 3.64 Arith: 4.50 n: 368 | Log: Parity d=-.241, rd=.000 Arith: Parity d=-.284, rd=.000 | Log: Parity d=-.179, rd=.000 Arith: Parity d=-.267, rd=.000 | Log: Parity d=-.212, rd=.000 Arith: Parity d=-.164, rd=.000 |

For all products shown, calculations using the LSR submission date as captured by the Pseudo-CLEC produced a longer average interval than calculations using the RSOR application date as was expected. As is evident from the table presented above, the use of the LSR submission date as opposed to the RSOR application date resulted in changing the Pseudo-CLEC results for dispatched residential service from parity to disparity.

The following table presents aggregated non-dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail during the original phase of the functionality test. (OP-4C PID) Only those products that demonstrate a difference in calculated results using the RSOR application date and Pseudo-CLEC captured LSR submission date are presented. CGE&Y found that those disaggregations that did not experience differences in results were due to very low volumes or random chance and not specific to certain products or services.

| Table 4.2.3 – OP-4C – Installation Interval – Non-Dispatched (N/MA) | | | | | | | |
|---------------------------------------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Product | Standard | Pseudo-CLEC Results (Appl. Date) | Pseudo-CLEC Results (LSR Date) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (Appl. Date) | Pseudo-CLEC vs. Standard (LSR Date) | Aggregate CLEC vs. Standard |
| Business | Log: 1.43 Arith: 1.90 n: 26710 | Log: 1.09 Arith: 1.54 n: 142 | Log: 1.27 Arith: 1.88 n: 139 | Log: 1.27 Arith: 1.65 n: 326 | Log: Parity d=-.263, rd=.000 Arith: Parity d=-.235, rd=.000 | Log: Parity d=-.121, rd=.000 Arith: Parity d=-.010, rd=.000 | Log: Parity d=-.119, rd=.000 Arith: Parity d=-.163, rd=.000 |
| Centrex 21 | Log: 1.62 Arith: 2.23 n: 7739 | Log: 2.81 Arith: 3.43 n: 28 | Log: 5.00 Arith: 5.00 n: 16 | Log: 2.58 Arith: 2.87 n: 31 | Log: Disparity d=0.561, r0=.002 Arith: Disparity d=0.666, r0=.000 | Log: Disparity d=1.197, r0=.000 Arith: Disparity d=1.542, r0=.000 | Log: Disparity d=0.470, r0=.004 Arith: Disparity d=0.355, r0=.024 |
| ISDN BRI | Log: 1.92 Arith: 2.40 n: 290 | Log: 3.53 Arith: 4.68 n: 19 | Log: 5.09 Arith: 6.05 n: 19 | Log: 6.73 Arith: 7.00 n: 2 | Log: Disparity d=0.745, r0=.001 Arith: Disparity d=1.368, r0=.000 | Log: Disparity d=1.222, r0=.000 Arith: Disparity d=2.188, r0=.000 | Log: Disparity d=1.597, r0=.012 Arith: Disparity d=2.755, r0=.000 |
| MBIT | Log: 3.67 Arith: 5.36 n: 17083 | Log: 5.13 Arith: 5.29 n: 14 | Log: 5.29 Arith: 5.50 n: 14 | Log: 6.62 Arith: 8.50 n: 2 | Log: Indet. -> DP d=0.327, r0=.110 Arith: Indet. -> P d=-.016, rd=.130 | Log: Indet. -> DP d=0.359, r0=.090 Arith: Indet. -> P d=0.032, rd=.172 | Log: Insuff Evid d=0.583, r0=.205, rd=.663 Arith: Indet. -> DP d=0.712, r0=.157 |
| PBX | Log: 1.78 Arith: 2.32 n: 561 | Log: 3.19 Arith: 3.50 n: 18 | Log: 3.59 Arith: 3.67 n: 18 | Log: 1.48 Arith: 2.00 n: 4 | Log: Disparity d=0.690, r0=.002 Arith: Disparity d=0.549, r0=.011 | Log: Disparity d=0.838, r0=.000 Arith: Disparity d=0.626, r0=.004 | Log: Indet. -> P d=-.205, rd=.164 Arith: Indet. -> P d=-.146, rd=.195 |
| Residential | Log: 1.64 Arith: 2.01 n: 529655 | Log: 0.99 Arith: 1.42 n: 194 | Log: 1.15 Arith: 1.68 n: 192 | Log: 1.15 Arith: 1.59 n: 11417 | Log: Parity d=-.562, rd=.000 Arith: Parity d=-.481, rd=.000 | Log: Parity d=-.400, rd=.000 Arith: Parity d=-.271, rd=.000 | Log: Parity d=-.402, rd=.000 Arith: Parity d=-.345, rd=.000 |
| UNE-P (POTS) | Log: 1.63 Arith: 2.00 n: 556366 | Log: 1.69 Arith: 2.02 n: 170 | Log: 1.75 Arith: 2.14 n: 161 | Log: 1.94 Arith: 2.26 n: 2522 | Log: Parity d=0.040, rd=.001 Arith: Parity d=0.013, rd=.000 | Log: Parity d=0.086, rd=.006 Arith: Parity d=0.109, rd=.013 | Log: Disparity d=0.211, r0=.000 Arith: Disparity d=0.207, r0=.000 |

For all products shown, calculations using the LSR submission date as captured by the Pseudo-CLEC produced a longer average interval than calculations using the RSOR application date as was expected. Specifically, installation intervals for Centrex and ISDN BRI were significantly increased, amplifying the disparity finding. However, the use of the LSR submission date did not produce different statistical findings for non-dispatched installation intervals.

The following table presents aggregated designed results for the Pseudo-CLEC, commercial CLECs, and Qwest retail during the original phase of the

functionality test. (OP-4D&E PID) Only those products that demonstrate a difference in calculated results using the RSOR application date and Pseudo-CLEC captured LSR submission date are presented. CGE&Y found that those disaggregations that did not experience differences in results were due to very low volumes or random chance and not specific to certain products or services.

| Table 4.2.4 – OP-4D&E – Installation Interval – Interval Zones 1 & 2 (A/HA) | | | | | | | |
|-----------------------------------------------------------------------------|----------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Product | Standard | Pseudo-CLEC Results (Appl. Date) | Pseudo-CLEC Results (LSR Date) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (Appl. Date) | Pseudo-CLEC vs. Standard (LSR Date) | Aggregate CLEC vs. Standard |
| DS0 | Log: 5.77 Arith: 8.26 n: 221 | Log: 3.57 Arith: 3.93 n: 60 | Log: 4.40 Arith: 4.67 n: 60 | No data available | Log: Parity d=-.640, rd=.000 Arith: Parity d=-.342, rd=.000 | Log: Parity d=-.366, rd=.000 Arith: Parity d=-.284, rd=.000 | No data available |
| ISDN BRI | Log: 7.85 Arith: 9.69 n: 1733 | Log: 15.03 Arith: 16.00 n: 12 | Log: 14.94 Arith: 15.92 n: 12 | Log: 13.84 Arith: 13.92 n: 13 | Log: Disparity d=1.023, r0=.000 Arith: Disparity d=0.759, r0=.004 | Log: Disparity d=1.014, r0=.000 Arith: Disparity d=0.749, r0=.005 | Log: Disparity d=0.892, r0=.001 Arith: Disparity d=0.509, r0=.034 |
| MBIT | Log: 10.59 Arith: 11.20 n: 17051 | Log: 5.00 Arith: 5.00 n: 3 | Log: 5.86 Arith: 6.00 n: 3 | Log: 24.00 Arith: 24.00 n: 1 | Log: Parity d=-2.33, rd=.000 Arith: Parity d=-1.17, rd=.006 | Log: Parity d=-1.84, rd=.000 Arith: Parity d=-.978, rd=.014 | Log: Disparity d=2.630, r0=.004 Arith: Disparity d=2.409, r0=.008 |

For all DS0 and Megabit, calculations using the LSR submission date as captured by the Pseudo-CLEC produced a longer average interval than calculations using the RSOR application date. However, ISDN BRI results improved slightly when using the LSR submission date. The use of the LSR submission date did not produce different statistical findings for designed installation intervals.

Although the statistical finding was changed for only one product (dispatched Residential), CGE&Y finds that the use of LSR submission date as opposed to the Qwest RSOR application date had a significant impact on several other performance results. CGE&Y further finds that unless the RSOR application date is the same as the LSR submit date, a CLEC has no way to determine or verify what the application date would be for performance measurement calculations. In addition, CGE&Y's findings reflect that of the 980 LSRs considered in this analysis, 96 resulted in a delay of 2 or more business days between the LSR submit date and the RSOR application date. CGE&Y questions what type error on an LSR could account for a 3 or 4 day delay in order entry without resulting in a reject notification to the CLEC. This time delay is never accounted for in any performance measurement reporting, however Qwest should be obligated to justify the delay between the submission of an LSR and the time it is eventually entered into the SOP. This issue severely impacts a CLEC's ability to perform

any data reconciliation, therefore CGE&Y recommends that Qwest provide the application date in the notifiers sent to the CLEC or the TAG should consider revising the PID to use the LSR submit date in calculating the OP-4 measure. In the alternative, consideration should be given to measuring the time delay between LSR submission date and the RSOR application date.

CGE&Y analyzed Pseudo-CLEC data for the retest period and compared the LSR submission date with the application date for the corresponding orders in RSOR. The result of this analysis indicate that the number of orders with application date 2 or more business days after the LSR submission date were reduced to just 1 case. This significant reduction has been due in large part to the increase in percentage of LSRs input to the SOP the same day they are received. Qwest indicated that the percentage of LSRs turned around the same day (“in today, out today”) has increased to over 98% from 45-60% during the functionality test. Thus, the application date would be equal to the LSR received date at least in over 98% of orders assuming Qwest maintains this 98% “in today, out today” ratio. Qwest has also instituted several quality controls to ensure the application date is being properly assigned. Application date is one of many data elements that are reviewed as part of Qwest’s quality check list. Beginning the summer of 2001, Qwest checked at least 10% of service orders to ensure the application date was correctly assigned. In addition, Qwest has recently begun verifying the application date on all service orders submitted one day each week. To ensure that LSRs are worked promptly when received, Qwest produces reports detailing all the LSRs waiting to be worked. Qwest also has instituted a 4-hour waiting period for all requests to CLECs for clarification before jeopardizing the LSR. Thus, if CLECs do not respond to Qwest’s request for information necessary to process the LSR, Qwest will officially place the LSR in jeopardy.

Based on the results of retest data which supports the positive effect of Qwest’s improved quality control procedures, CGE&Y has closed AZIWO1217. CGE&Y finds that parties can rely on the accuracy of Qwest’s performance measurement reporting to compare average installation intervals Qwest provides its CLECs customers to that which Qwest provides itself, its affiliates and its retail customers.

4.3 OP-5 – New Service Installation Quality

Definition

The OP-5 measure reflects the percentage of new order installations that experience trouble within the first 30 calendar days following installation. This measurement is intended to report the aggregated results for all products. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data sources were considered.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of completed service orders that experienced a trouble within the first 30 days following installation by the total number of completed service orders. For Qwest adhoc data, this measurement is calculated by dividing the number of completed service orders for the Pseudo-CLEC that experienced a trouble within the first 30 days after installation by the total number of completed service orders for the Pseudo-CLEC.

Results

| Table 4.3.1 – New Service Installation Quality | | |
|------------------------------------------------|----------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| OP-5 | 2.45% n=980 | 2.45% n=980 |

Findings and Conclusions

Results for troubles within 30 days of installation using Qwest adhoc and Pseudo-CLEC data indicate no difference. For non-designed troubles, Pseudo-CLEC data included 20 troubles within 30 days of installation. However, Qwest's MTAS adhoc data indicated that 1 of these troubles was not within 30 days of installation. CGE&Y issued AZIWO2131 detailing this discrepancy. Qwest responded that the reported problem was that the CLEC could not call information. This was due to the fact that the original LSR did not specify a PIC. Therefore, this trouble would not be eligible for OP-5, according to the PID. For designed troubles, Qwest's WFAC adhoc data indicated five troubles occurred within 30 days of installation, while Pseudo-CLEC data indicated that only four of these troubles occurred within 30 days of installation. AZIWO2131 also covered this issue. Qwest responded that this trouble was not eligible for OP-5 as evidenced by the adhoc data. Therefore, CGE&Y finds that Qwest's adhoc data for calculating the percentage of new installations experiencing troubles within the first 30 days is accurately reflecting performance observed by the Pseudo-CLEC and has closed AZIWO2131.

4.4 OP-6 – Delayed Days

Definition

The OP-6 measure reflects the average number of business days that Pseudo-CLEC service orders are delayed beyond the original due date. This measurement is intended to report the aggregated results for all products and for facility and non-facility reasons on all orders that were delayed during the initial phase of the functionality test.

Formula

For Pseudo-CLEC captured data, the average delayed days is calculated by taking the difference between the original due date and the completion date for those orders completed after the original due date. This measurement is calculated by summing the delayed days for all Pseudo-CLEC orders and dividing by the total number of service orders completed after the original due date. For Qwest adhoc data, the average delayed days is calculated by taking the difference between the original due date and the completion date for orders that completed after the due date had passed. This measurement is calculated by summing the delayed days for Pseudo-CLEC orders and dividing by the total number of Pseudo-CLEC service orders completed after the original due date.

Results

| Table 4.4.1 – Delayed Days | | |
|----------------------------|---------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| OP-6 | 8.07 n=123 | 6.59 n=156 |

Findings and Conclusions

Results for average delayed days using Qwest adhoc and Pseudo-CLEC data indicate a difference of 1.48 days. This difference was due entirely to discrepancies in due dates. (See §4.1, OP-3) There were 48 cases where the Qwest adhoc data indicated that the service order was completed by the scheduled due date, but the Pseudo-CLEC data indicated the due date was missed. Similarly, there were 15 cases where Pseudo-CLEC data indicated that the service order was completed by the scheduled due date, but the Qwest adhoc data indicated that the due date was missed. In total, the Pseudo-CLEC recorded due date did not match the due date recorded in Qwest's RSOR adhoc data 111 times.

CGE&Y issued AZIWO2130 to document this discrepancy. (See §4.1, OP-3) Qwest's response to this IWO indicated that for the majority of cases identified, manual input errors were the reason the due date was improperly recorded on the FOC. These manual input errors resulted in the understatement in the number of installation commitments missed from the Pseudo-CLEC's perspective. The inclusion of these orders considered missed by the Pseudo-CLEC would serve to reduce the average delayed days reported in OP-6 PID results, as these orders generally missed the commitment by a smaller margin than those considered by Qwest to have missed the original commitment. CGE&Y finds that this error would affect commercial CLEC results for those CLECs that experienced similar flow-through rates to the Pseudo-CLEC. However, since most retail orders flow-through, CGE&Y finds that this problem would not have a similar impact on retail results. However, Qwest's contention is that the due date provided via the FOC is not the original due date as required by the PID. The PID original due date is that which is contained in the service order, and therefore its published performance measure results accurately reflect its performance in meeting installation due dates and thus delayed days as well. The PID does not specify whether the appropriate due date for measurement calculations is the due date transmitted via the FOC or the due date contained on the service order, therefore, CGE&Y cannot conclude that results published in Qwest's monthly results are non-compliant with the PID. CGE&Y does recognize that the transmission of an incorrect due date can place CLECs at a disadvantage and severely impact the CLEC's relation with its end-user customer.

For comparison purposes, CGE&Y recalculated the results for OP-6 PID, originally presented in §2.5 of the Final Functionality Report, using the Pseudo-CLEC captured due dates for the 111 cases identified in AZIWO2130. These results are not intended to provide definitive parity/disparity conclusions, but rather to reflect average number of days service is delayed when the original due date is missed from the Pseudo-CLEC's perspective.

The following OP-6 PID results present performance measurement calculations for the Pseudo-CLEC using the due date present in RSOR ("SODD") and the due date provided on the FOC ("FOC DD"), captured in the Pseudo-CLEC data. For each product result, CGE&Y provides a parity/disparity finding where sufficient data are available for informational purposes. In addition, CGE&Y presents aggregate CLEC performance results and statistical findings based on the due date available in RSOR. These results are not intended to match those presented in §2.5 of the Final Functionality Report. These performance results are based on more recent data. In addition, CGE&Y has removed MSA and Zone disaggregations to increase sample size and to focus on the difference between the use of the RSOR due date and Pseudo-CLEC captured due date.

The following table presents aggregated dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail delayed days due to non facility reasons

during the original phase of the functionality test. (OP-6A-1&2 PID) Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

| Table 4.4.2 – OP-6A – Delayed Days for Non-Facility Reasons – Dispatched (Y/MA) | | | | | | | |
|----------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
| Business | Log: 2.56 Arith: 5.12 n: 632 | Log: 1.74 Arith: 2.00 n: 4 | Log: 1.79 Arith: 2.00 n: 5 | Log: 4.53 Arith: 8.19 n: 42 | Log: Indet. -> P d=-.332, rd=.109 Arith: Indet. -> P d=-.310, rd=.117 | Log: Indet. -> P d=-.309, rd=.093 Arith: Indet. -> P d=-.310, rd=.092 | Log: Disparity d=0.533, r0=.000 Arith: Disparity d=0.306, r0=.027 |
| Residential | Log: 2.25 Arith: 4.60 n: 1397 | Log: 1.79 Arith: 2.00 n: 2 | Log: 1.49 Arith: 1.67 n: 3 | Log: 1.94 Arith: 2.76 n: 74 | Log: Insuff Evid d=-.187, r0=.604, rd=.252 Insuff Evid d=-.283, r0=.656, rd=.211 | Log: Indet. -> P d=-.333, rd=.143 Arith: Indet. -> P d=-.320, rd=.148 | Log: Parity d=-.121, rd=.000 Arith: Parity d=-.201, rd=.000 |
| UNE-P (POTS) | Log: 2.34 Arith: 4.76 n: 2029 | Log: 1.47 Arith: 1.60 n: 5 | Log: 1.23 Arith: 1.31 n: 13 | Log: 2.55 Arith: 3.74 n: 27 | Log: Indet. -> P d=-.382, rd=.068 Arith: Indet. -> P d=-.334, rd=.083 | Log: Parity d=-.515, rd=.002 Arith: Parity d=-.365, rd=.010 | Log: Indet. -> P d=0.075, rd=.139 Arith: Parity d=-.108, rd=.021 |

The use of the Pseudo-CLEC captured due date increased the number of installation commitments missed. However, these commitments were missed by a relatively small margin, as dispatched delayed days for non-facility reasons decreased for residential and UNE-P installations. From the Pseudo-CLEC's perspective, residential results for the Pseudo-CLEC lean towards parity and UNE-P results are in parity with Qwest retail.

The following table presents aggregated non-dispatched results for the Pseudo-CLEC, commercial CLECs, and Qwest retail delayed days due to non facility reasons during the original phase of the functionality test. (OP-6A-3 PID) Only those products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

Table 4.4.3 – OP-6A – Delayed Days for Non-Facility Reasons – Non-Dispatched (N/MA)

| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
|--------------|-------------------------------------|----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Business | Log: 2.42 Arith: 4.33 n: 236 | n=0 | Log: 4.90 Arith: 7.00 n: 5 | Log: 4.89 Arith: 5.75 n: 4 | | Log: Indet. -> DP d=0.697, r0=.061 Insuff Evid d=0.344, r0=.223, rd=.552 | Log: Indet. -> DP d=0.694, r0=.084 Arith: Insuff Evid d=0.183, r0=.358, rd=.420 |
| Centrex | Log: 2.41 Arith: 3.84 n: 116 | n=0 | Log: 1.66 Arith: 2.00 n: 3 | | | Log: Indet. -> P d=-.349, rd=.139 Arith: Indet. -> P d=-.401, rd=.120 | |
| PBX | Log: 2.23 Arith: 3.43 n: 7 | n=0 | Log: 2.00 Arith: 2.00 n: 2 | | | Log: Insuff Evid d=-.103, r0=.551, rd=.314 Insuff Evid d=-.374, r0=.679, rd=.206 | |
| Residential | Log: 2.67 Arith: 5.38 n: 765 | Log: 2.68 Arith: 4.60 n: 5 | Log: 2.51 Arith: 3.50 n: 16 | Log: 1.79 Arith: 2.46 n: 57 | Log: Insuff Evid d=0.004, r0=.496, rd=.265 Insuff Evid d=-.079, r0=.570, rd=.208 | Log: Indet. -> P d=-.053, rd=.090 Arith: Parity d=-.192, rd=.029 | Log: Parity d=-.331, rd=.000 Arith: Parity d=-.298, rd=.000 |
| UNE-P (POTS) | Log: 2.61 Arith: 5.13 n: 1001 | Log: 1.00 Arith: 1.00 n: 1 | Log: 1.54 Arith: 2.00 n: 10 | Log: 1.66 Arith: 2.14 n: 44 | Log: Indet. -> P d=-.758, rd=.148 Insuff Evid d=-.441, r0=.670, rd=.234 | Log: Parity d=-.437, rd=.012 Arith: Parity d=-.334, rd=.026 | Log: Parity d=-.377, rd=.000 Arith: Parity d=-.320, rd=.000 |

The use of the Pseudo-CLEC captured due date increased the number of installation commitments missed. In fact, while results using the RSOR due date indicate there were no missed due dates for Business, Centrex, or PBX, the use of the Pseudo-CLEC captured due date indicates there were 5, 3, and 2 appointments missed for these products, respectively. The only difference in statistical findings were for residential and UNE-P. Specifically, residential results for the Pseudo-CLEC lean towards parity and UNE-P results are in parity with Qwest retail when using the due date on the FOC.

The following table presents aggregated designed results for the Pseudo-CLEC, commercial CLECs, and Qwest retail delayed days due to non facility reasons during the original phase of the functionality test. (OP-6A-4&5 PID) Only those

products that demonstrate a difference in calculated results using the RSOR due date and Pseudo-CLEC captured due date are presented.

| Table 4.4.4 – OP-6A – Delayed Days for Non-Facility Reasons – Interval Zones 1 & 2 (A/HA) | | | | | | | |
|-------------------------------------------------------------------------------------------|-------------------------------------|----------------------------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Product | Standard | Pseudo-CLEC Results (SODD) | Pseudo-CLEC Results (FOC DD) | Aggregate CLEC Results | Pseudo-CLEC vs. Standard (SODD) | Pseudo-CLEC vs. Standard (FOC DD) | Aggregate CLEC vs. Standard |
| DS0 | Log: 9.02 Arith: 17.67 n: 12 | n=0 | Log: 1.00 Arith: 1.00 n: 3 | | | Log: Parity d=-1.66, rd=.001 Arith: Indet. -> P d=-.587, rd=.088 | |
| Unbundled 2-Wire Analog | Log: 2.43 Arith: 4.88 n: 3030 | n=0 | Log: 1.35 Arith: 1.50 n: 4 | Log: 2.19 Arith: 4.16 N: 31 | | Log: Indet. -> P d=-.475, rd=.064 Arith: Indet. -> P d=-.359, rd=.099 | Log: Parity d=-.089, rd=.019 Arith: Parity d=-.076, rd=.023 |
| Unbundled Analog | Log: 2.43 Arith: 4.88 n: 3030 | n=0 | Log: 1.00 Arith: 1.00 n: 1 | Log: 3.00 Arith: 3.00 n: 1 | | | |

Results using the RSOR due date indicate there were no missed due dates for DS0, unbundled 2-wire analog loops, or unbundled analog loops, while using the Pseudo-CLEC captured due date indicates there were 3, 4, and 1 appointments missed for these products, respectively. DS0 results were in parity with Qwest retail.

Based on the results presented above, CGE&Y finds that Qwest's transmission of an incorrect due date via the FOC improved Qwest's OP-6 performance from the Pseudo-CLEC's perspective. However, CGE&Y's main concern is to ensure that the FOC and the service order reflect the same due date, as there is potentially a severe impact on a CLEC's relation with its end-user customer when a service installation commitment date is not met.

Qwest has implemented several quality control mechanisms to ensure the due date transmitted via the FOC is identical to that which is entered into the SOP. On a monthly basis, Qwest's quality review team compares 10% of all due dates. In addition, 100% of all due dates are reviewed for a one day period each week. Qwest has also implemented a due date GUI which includes a database containing due dates based on the SIG. Service Representatives are personally coached when input errors are discovered.

Although not all of the above quality control procedures were in place during the retest period, CGE&Y observed significant improvement in the reduction of due date discrepancies. CGE&Y analyzed Pseudo-CLEC data for the retest period and compared the FOC due dates with the due dates for the corresponding orders contained in RSOR. The results of this analysis indicate that the number of orders where the Pseudo-CLEC captured due date differed from the RSOR due date were significantly reduced. During the retest, there were only 5 cases where the FOC indicated a due date different than the due date contained in RSOR. Based on the results of retest data which supports the positive effect of Qwest's improved quality control procedures, CGE&Y has closed AZIWO2130. CGE&Y finds that parties can rely on the accuracy of Qwest's performance measurement reporting to compare the average delayed days experienced by the CLEC to that experienced by Qwest's retail customers.

4.5 OP-7 – Coordinated “Hot Cut” Interval

Definition

The OP-7 measure reflects the average time for Qwest to complete coordinated “hot cuts” of unbundled loops.

Formula

For Pseudo-CLEC captured data, the average hot cut interval is calculated by taking the difference between the time Qwest called CGE&Y to inform it that the hot cut was going to begin and the time AT&T called to notify CGE&Y that the testing of the loop was complete. This measurement is calculated by summing all the hot cut intervals for Pseudo-CLEC orders and dividing by the total number of hot cuts performed. For Qwest adhoc data, the average hot cut interval is calculated by taking the difference between the lift and lay time. This measurement is calculated by summing the hot cut intervals for Pseudo-CLEC classified hot cuts and dividing by the total number of Pseudo-CLEC hot cuts completed.

Results

| Table 4.5.1 – Coordinated “Hot Cut” Interval (Minutes:seconds) | | |
|---------------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| OP-7 | 8:42 n=13 | 25:00 n=13 |

Findings and Conclusions

Results for average hot cut intervals using Qwest adhoc and Pseudo-CLEC data indicate a difference of 0:16:18. CGE&Y finds that the difference in the hot cut intervals is explained by the different data elements used in the adhoc and Pseudo-CLEC calculations. The Pseudo-CLEC calculation is based on the time Qwest notified CGE&Y that the cut was going to begin and ended the time AT&T notified CGE&Y that the testing was complete, whereas the adhoc calculation is based on the lift and lay times as per version 6.3 of the PID. CGE&Y finds the 16 minute difference to be due to the time taken to test the loop upon completion of the cut.

4.6 OP-13 – Coordinated Cuts on Time

Definition

The OP-13 measure reflects the percentage of coordinated hot cuts completed within one hour of the scheduled due time.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of hot cuts completed within one hour of the scheduled due time indicated on the FOC by the total number of hot cuts. For Qwest adhoc data, this measurement is calculated by dividing the number of Pseudo-CLEC hot cuts completed within one hour of the due time by the total number of Pseudo-CLEC hot cuts.

Results

| Table 4.6.1 – Coordinated Cuts on Time | | |
|-----------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| OP-13 | 100% n=13 | 100% n=13 |

Findings and Conclusions

Results for hot cuts completed on time using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that the Qwest adhoc data for calculating the timeliness of hot cut completions accurately reflects performance observed by the Pseudo-CLEC during the functionality test.

5 Maintenance & Repair – Non-Designed Services

5.1 MR-3 – Out of Service Cleared Within 24 Hours

Definition

The MR-3 measure reflects the percentage of Pseudo-CLEC out of service troubles that are cleared within 24 hours of receipt of a trouble report. This measure is intended to report aggregated results for troubles on non-designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this evaluation.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of non-designed out of service troubles that are cleared within 24 hours of the submission of a trouble report to Qwest by the total number of non-designed out of service trouble reports submitted. The out of service indicator was extracted from the Qwest adhoc data. For Qwest adhoc data, this measurement is calculated by dividing the number of non-designed out of service trouble reports with a clear date and time within 24 hours of the trouble receipt date and time by the total number of non-designed out of service trouble reports received.

Results

| Table 5.1.1 – Out of Service Cleared within 24 Hours (Non-designed) | | |
|---------------------------------------------------------------------|---------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-3 | 87.5% n=32 | 87.5% n=32 |

Findings and Conclusions

Results for out of service non-designed troubles cleared within 24 hours using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that the Qwest adhoc data for non-designed trouble restoration timeliness accurately reflects the performance observed by the Pseudo-CLEC.

5.2 MR-4 – All Troubles Cleared Within 48 Hours

Definition

The MR-4 measure reflects the percentage of all Pseudo-CLEC troubles that are cleared within 48 hours of receipt of a trouble report. This measure is intended to report aggregated results for troubles on non-designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data sources were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of non-designed troubles that are cleared within 48 hours of the submission of a trouble report to Qwest by the total number of non-designed trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of non-designed trouble reports with a cleared date and time within 48 hours of the trouble receipt date and time by the total number of non-designed trouble reports received.

Results

| Table 5.2.1 – All Troubles Cleared within 48 Hours (Non-designed) | | |
|-------------------------------------------------------------------|---------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-4 | 100% n=41 | 100% n=41 |

Findings and Conclusions

Results for non-designed troubles cleared within 48 hours using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that Qwest adhoc data for non-designed trouble restoration intervals accurately reflects performance observed by the Pseudo-CLEC.

5.3 MR-6 – Mean Time to Restore

Definition

The MR-6 measure reflects the average interval for Qwest to restore service to the Pseudo-CLEC for non-designed troubles. This measure is intended to report

aggregated results for troubles on non-designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, the restoral interval is calculated by taking the difference between the trouble submit date and time and the trouble cleared date and time. This measurement is calculated by summing all the non-designed trouble restoral intervals and dividing by the total number of non-designed troubles submitted. For Qwest adhoc data, the restoral interval is calculated by taking the difference between the trouble received date and time and the trouble cleared date and time. This measurement is calculated by summing all the Pseudo-CLEC non-designed trouble restoral intervals and dividing by the total number of Pseudo-CLEC non-designed troubles received.

Results

| Table 5.3.1 – Mean Time to Restore (Non-designed) | | |
|--------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-6 | 7:25:40 n=41 | 7:25:25 n=41 |

Findings and Conclusions

Results for non-designed trouble restoral intervals using Qwest adhoc and Pseudo-CLEC data indicate a difference of only 15 seconds. Therefore, CGE&Y finds that Qwest adhoc data for non-designed trouble restoration intervals accurately reflects the performance observed by the Pseudo-CLEC.

5.4 MR-7 – Repair Repeat Report Rate

Definition

The MR-7 measure reflects the percentage of Pseudo-CLEC troubles that are repeated within 30 days for non-designed services. This measure is intended to report aggregated results for troubles on non-designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of non-designed troubles that are repeated within 30 days of when the preceding initial trouble was closed by the total number of Pseudo-CLEC trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of non-designed troubles received within 30 days of when the preceding initial trouble was closed by the total number of Pseudo-CLEC non-designed troubles received.

Results

| Table 5.4.1 – Repeat Repair Report Rate (Non-designed) | | |
|-------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-7 | 4.26% n=47 | 4.26% n=47 |

Findings and Conclusions

Results for non-designed repeat repair reports using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that Qwest's adhoc data for non-designed repeat repair report rates accurately reflects the performance observed by the Pseudo-CLEC.

5.5 MR-9 – Repair Appointments Met

Definition

The MR-9 measure reflects the percentage of Pseudo-CLEC troubles that are cleared by the scheduled appointment date and time. This measure is intended to report aggregated results for troubles on non-designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of non-designed troubles that are cleared by the scheduled appointment date and time by the total number non-designed Pseudo-CLEC trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of non-designed troubles that are cleared by the scheduled appointment

date and time (“MET_CMT”) by the total number of non-designed Pseudo-CLEC trouble reports received.

Results

| Table 5.5.1 – Repair Appointments Met (Non-designed) | | |
|-----------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-9 | 88.57% n=35 | 85.71% n=35 |

Findings and Conclusions

Results for the percentage of repair appointments met using Qwest adhoc and Pseudo-CLEC data indicate a difference of 2.86 percent. This discrepancy was based on the treatment of 1 non-designed trouble. Pseudo-CLEC data indicates that this trouble had a scheduled repair appointment date of July 16, 2001 at 8:00 PM, but did not clear until July 17, 2001 at 10:55 AM. Qwest adhoc MTAS data indicates that the scheduled repair appointment was met, but does not contain the appointment date and time. However, Qwest adhoc and Pseudo-CLEC data did agree on the cleared time for this trouble. Therefore, CGE&Y issued AZIWO1218. Qwest’s response to this IWO indicated that it was unable to meet the original repair appointment due to a no access situation. Qwest notified the Pseudo-CLEC and the repair appointment was rescheduled for the next evening. CGE&Y verified that there was in fact a “no access” and that the rescheduled due date was met. Qwest has indicated that the PID will be updated to reflect time exclusions due to no access which are used for other M&R performance measures. This revision has been agreed to by the Arizona TAG and CGE&Y has closed this IWO. Therefore, CGE&Y finds that Qwest adhoc data accurately reflects the percentage of repair appointments met observed by the Pseudo-CLEC during the functionality test.

6 Maintenance & Repair – Designed Services

6.1 MR-3 – Out of Service Cleared Within 24 Hours

Definition

The MR-3 measure for designed services reflects the percentage of Pseudo-CLEC out of service troubles that are cleared within 24 hours of receipt of a trouble report. This measure is intended to report aggregated results for troubles on designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data sources were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of out of service designed troubles that are cleared within 24 hours of the submission of a trouble report to Qwest by the total number of out of service designed trouble reports submitted. The out of service indicator was extracted from the Qwest adhoc data. For Qwest adhoc data, this measurement is calculated by dividing the number of designed out of service trouble reports cleared within 24 hours (“OSS_LT24”) by the total number of out of service designed trouble reports received (“OOS_CNT”).

Results

| Table 6.1.1 – Out of Service Cleared within 24 Hours (Designed) | | |
|-----------------------------------------------------------------|---------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-3 | 100% n=1 | 0% n=1 |

Findings and Conclusions

Results for out of service designed troubles cleared within 24 hours using Qwest adhoc and Pseudo-CLEC data produced inconsistent results. Pseudo-CLEC data for the applicable designed out of service trouble indicates a restoral interval of 49:39:00. Qwest adhoc data for the same trouble indicated a restoral interval of 0:12:00. Qwest adhoc WFAC data does not contain the actual trouble receipt or trouble cleared times or any information on the duration or nature of any time excluded due to such things as no access. CGE&Y issued AZIWO1219 to verify

the trouble receipt and cleared times for this trouble and the time excluded due to no access situations. Qwest's response to this IWO indicated that the trouble received time observed by Qwest matched the trouble report time captured by the Pseudo-CLEC, however the trouble cleared time captured by the Pseudo-CLEC was not the actual time the trouble was cleared. The Pseudo-CLEC cleared time was obtained from the CEMR status email that indicated the TR State "cleared." However, Qwest explained that "the CEMR system currently sends a status email for TR State cleared and TR State closed which currently displays the date/time stamps from the OSS function in the TR Status Time and Restored Time fields, rather than the actual time of restoral."

The CLEC is not currently provided with the date and time a trouble is cleared for designed services from WFAC through the status update emails provided. This issue does not suggest that Qwest is currently operating in a manner inconsistent with the PID or that its performance measurement data gathering or calculating methods are incorrect, therefore AZIWO1219 has been closed. However, since this severely impacts a CLEC's ability to perform any data reconciliation, CGE&Y would recommend that Qwest provide the trouble received and trouble cleared date and time through WFAC as well as in the notifiers sent to the CLEC. Qwest has agreed to propose changing the Restored Time field to the date and time that the technician enters as the restoral time. CGE&Y validated Qwest's proposed changes and reviewed a CEMR trouble ticket test case. Qwest issued a trouble ticket, placed a no access on the ticket, removed the no access, logged the trouble as cleared, and subsequently closed the ticket. CGE&Y verified that CEMR accurately generated emails reflecting these activities which would be transmitted to the CLECs. Moreover, the information contained in the emails matched the information in WFA. This change must be presented through the new CMP and prioritized as agreed by the parties. Once Qwest implements this fix, the CLEC captured cleared time from the CEMR emails would match the trouble cleared time observed by Qwest in WFA and used to calculate performance results.

6.2 MR-4 – All Troubles Cleared Within 48 Hours

Definition

The MR-4 measure reflects the percentage of all Pseudo-CLEC designed troubles that are cleared within 48 hours of receipt of a trouble report. This measure is intended to report aggregated results for troubles on designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of out of service designed troubles that are cleared within 48 hours of the submission of a trouble report to Qwest by the total number of designed trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of designed trouble reports received that were cleared within 48 hours (“_48HR_CT”) by the total number of designed trouble reports received.

Results

| Table 6.2.1 – All Troubles Cleared within 48 Hours (Designed) | | |
|----------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-4 | 100% n=17 | 94.12% n=17 |

Findings and Conclusions

Results for designed troubles cleared within 48 hours of initial report using Qwest adhoc and Pseudo-CLEC data indicate a difference of 5.88 percent. This discrepancy was based on the same designed trouble noted in MR-3. (See § 6.1, MR-3 Designed Services) Qwest adhoc WFAC data does not contain the actual trouble receipt or trouble cleared times or any information on the duration or nature of any time excluded due to such things as no access. Therefore, CGE&Y issued AZIWO1219 to verify the trouble receipt and cleared times for this trouble and the time excluded due to no access situations. Qwest’s response to this IWO indicated that the trouble received time observed by Qwest matched the trouble report time captured by the Pseudo-CLEC, however the trouble cleared time captured by the Pseudo-CLEC was not the actual time the trouble was cleared. The Pseudo-CLEC cleared time was obtained from the CEMR status email that indicated the TR State “cleared.” However, Qwest explained that “the CEMR system currently sends a status email for TR State cleared and TR State closed which currently displays the date/time stamps from the OSS function in the TR Status Time and Restored Time fields, rather than the actual time of restoral.”

The CLEC is not currently provided with the date and time a trouble is cleared for designed services from WFAC through the status update emails provided. This issue does not suggest that Qwest is currently operating in a manner inconsistent with the PID or that its performance measurement data gathering or calculating methods are incorrect, therefore AZIWO1219 has been closed. However, since this severely impacts a CLEC’s ability to perform any data reconciliation,

CGE&Y would recommend that Qwest provide the trouble received and trouble cleared date and time through WFAC as well as in the notifiers sent to the CLEC. Qwest has agreed to propose changing the Restored Time field to the date and time that the technician enters as the restoral time. CGE&Y validated Qwest's proposed changes and reviewed a CEMR trouble ticket test case. Qwest issued a trouble ticket, placed a no access on the ticket, removed the no access, logged the trouble as cleared, and subsequently closed the ticket. CGE&Y verified that CEMR accurately generated emails reflecting these activities which would be transmitted to the CLECs. Moreover, the information contained in the emails matched the information in WFA. This change must be presented through the new CMP and prioritized as agreed by the parties. Once Qwest implements this fix, the CLEC captured cleared time from the CEMR emails would match the trouble cleared time observed by Qwest in WFA and used to calculate performance results..

6.3 MR-5 – All Designed Troubles Cleared Within 4 Hours

Definition

The MR-5 measure reflects the percentage of trouble reports that are cleared within four hours of receipt of the trouble ticket for designed services. This measure is intended to report aggregated results for troubles on designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of designed troubles that are cleared within 4 hours of the submission of a trouble report to Qwest by the total number of designed trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of designed trouble reports cleared within 4 hours of the trouble receipt (“_4HR_CT”) by the total number of Pseudo-CLEC designed troubles.

Results

| Table 6.3.1 – All Troubles Cleared Within 4 Hours (Designed) | | |
|---------------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-5 | 100% n=17 | 64.71% n=17 |

Findings and Conclusions

Results for designed troubles cleared within 4 hours of initial report using Qwest adhoc and Pseudo-CLEC data revealed a difference of 35.29 percent. Pseudo-CLEC records for six designed troubles indicate a clear time that was longer than 4 hours after the trouble submit time. Qwest adhoc WFAC data does not contain the actual trouble receipt or trouble-cleared times or any information on the duration or nature of any time excluded due to such things as no access. Therefore, CGE&Y issued AZIWO1219 to verify the trouble receipt and cleared times for these six troubles and the time excluded due to no access situations. Qwest's response to this IWO indicated that the trouble received time observed by Qwest matched that captured by the Pseudo-CLEC, however the trouble cleared time captured by the Pseudo-CLEC was not the actual time the trouble was cleared. The Pseudo-CLEC cleared time was obtained from the CEMR status email that indicated the TR State "cleared." However, Qwest explained that "the CEMR system currently sends a status email for TR State cleared and TR State closed which currently displays the date/time stamps from the OSS function in the TR Status Time and Restored Time fields, rather than the actual time of restoral."

The CLEC is not currently provided with the date and time a trouble is cleared for designed services from WFAC through the status update emails provided. This issue does not suggest that Qwest is currently operating in a manner inconsistent with the PID or that its performance measurement data gathering or calculating methods are incorrect, therefore AZIWO1219 has been closed. However, since this severely impacts a CLEC's ability to perform any data reconciliation, CGE&Y would recommend that Qwest provide the trouble received and trouble cleared date and time through WFAC as well as in the notifiers sent to the CLEC. Qwest has agreed to propose changing the Restored Time field to the date and time that the technician enters as the restoral time. CGE&Y validated Qwest's proposed changes and reviewed a CEMR trouble ticket test case. Qwest issued a trouble ticket, placed a no access on the ticket, removed the no access, logged the trouble as cleared, and subsequently closed the ticket. CGE&Y verified that CEMR accurately generated emails reflecting these activities which would be transmitted to the CLECs. Moreover, the information contained in the emails matched the information in WFA. This change must be presented through the new CMP and prioritized as agreed by the parties. Once Qwest implements this fix, the CLEC captured cleared time from the CEMR emails would match the trouble cleared time observed by Qwest in WFA and used to calculate performance results..

6.4 MR-6 – Mean Time to Restore

Definition

The MR-6 measure reflects the average interval for Qwest to restore service to the Pseudo-CLEC for designed services. This measure is intended to report aggregated results for troubles on designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, the restoral interval is calculated by taking the difference between the trouble submit date and time and the trouble cleared date and time. This measurement is calculated by summing all the designed trouble restoral intervals and dividing by the total number of designed troubles submitted by the Pseudo-CLEC. For Qwest adhoc data, the restoral interval is calculated by summing all the designed trouble restoral intervals (“ACTUALD”) and dividing by the total number of designed troubles received.

Results

| Table 6.4.1 – Mean Time to Restore (Designed) | | |
|--------------------------------------------------|-----------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-6 | 1:02:32 n=17 | 8:42:08 n=17 |

Findings and Conclusions

Results for designed trouble mean time to restore using Qwest adhoc and Pseudo-CLEC data reveal a difference of 7:40:48. Qwest adhoc WFAC data does not contain the actual trouble receipt or trouble cleared times or any information on the duration or nature of any time excluded due to such things as no access. Therefore, CGE&Y issued AZIWO1219 to verify the trouble receipt and cleared times for these 17 designed troubles and the time excluded due to no access situations. Qwest’s response to this IWO indicated that the trouble received time observed by Qwest matched that captured by the Pseudo-CLEC, however the trouble cleared time captured by the Pseudo-CLEC was not the actual time the trouble was cleared. The Pseudo-CLEC cleared time was obtained from the CEMR status email that indicated the TR State “cleared.” However, Qwest explained that “the CEMR system currently sends a status email for TR State

cleared and TR State closed which currently displays the date/time stamps from the OSS function in the TR Status Time and Restored Time fields, rather than the actual time of restoral.”

The CLEC is not currently provided with the date and time a trouble is cleared for designed services from WFAC through the status update emails provided. This issue does not suggest that Qwest is currently operating in a manner inconsistent with the PID or that its performance measurement data gathering or calculating methods are incorrect, therefore AZIWO1219 has been closed. However, since this severely impacts a CLEC’s ability to perform any data reconciliation, CGE&Y would recommend that Qwest provide the trouble received and trouble cleared date and time through WFAC as well as in the notifiers sent to the CLEC. Qwest has agreed to propose changing the Restored Time field to the date and time the technician enters as the restoral time. CGE&Y validated Qwest’s proposed changes and reviewed a CEMR trouble ticket test case. Qwest issued a trouble ticket, placed a no access on the ticket, removed the no access, logged the trouble as cleared, and subsequently closed the ticket. CGE&Y verified that CEMR accurately generated emails reflecting these activities which would be transmitted to the CLECs. Moreover, the information contained in the emails matched the information in WFA. This change must be presented through the new CMP and prioritized as agreed by the parties. Once Qwest implements this fix, the CLEC captured cleared time from the CEMR emails would match the trouble cleared time observed by Qwest in WFA and used to calculate performance results..

6.5 MR-7 – Repair Repeat Report Rate

Definition

The MR-7 measure reflects the percentage of Pseudo-CLEC troubles that are repeated within 30 days for designed services. This measure is intended to report aggregated results for troubles on designed services. Only troubles found in both the Pseudo-CLEC and Qwest adhoc data were considered for this analysis.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of designed troubles that are repeated within 30 days of when the preceding initial trouble was closed by the total number of Pseudo-CLEC designed trouble reports submitted. For Qwest adhoc data, this measurement is calculated by dividing the number of designed troubles received within 30 days of when the preceding initial trouble was closed by the total number of Pseudo-CLEC designed troubles received.

Results

| Table 6.5.1 – Repeat Repair Report Rate (Designed) | | |
|---------------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| MR-7 | 0.00% n=17 | 0.00% n=17 |

Findings and Conclusions

Results for designed repeat repair reports using Qwest adhoc and Pseudo-CLEC data produced identical results. Therefore, CGE&Y finds that Qwest adhoc data for designed repeat repair report rates accurately reflects the performance observed by the Pseudo-CLEC.

7 Billing

7.1 BI-1 – Time to Provide Recorded Usage Records

Definition

The BI-1A measure reflects the average interval (in business days) for Qwest to provide recorded daily usage records to the Pseudo-CLEC. As the Qwest adhoc data does not contain identifying information, the Pseudo-CLEC and Qwest adhoc data sources may contain different usage records. CGE&Y’s verification of whether Qwest provided the Pseudo-CLEC with complete ODUF records detailing all recorded usage is ongoing. (See Supplemental Evaluation of DUF Records)

Formula

For Pseudo-CLEC captured data, the DUF interval is calculated by taking the business day difference between the record date and the DUF date for each individual usage record transmitted to the Pseudo-CLEC. This measurement is calculated by summing the intervals for all Pseudo-CLEC daily recorded usage records and dividing by the total number of daily recorded usage records transmitted to the Pseudo-CLEC. For Qwest adhoc data, the DUF interval is calculated by multiplying the number of daily usage records transmitted (“MSGCTQTY”) by the DUF interval (“ELAP_TM”) for each DUF interval in the adhoc. The sum of these products gives the total DUF interval. This measurement is calculated by dividing the total DUF interval by the number of daily usage records.

Results

| Table 7.1.1 – Time to Provide Recorded Usage Records (Days) | | |
|-------------------------------------------------------------|----------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| BI-1 | 2.30 n=3201 | 2.28 n=2861 |

Findings and Conclusions

Results for the time to provide daily usage records using Qwest adhoc and Pseudo-CLEC data indicate a difference of only 0.02 days. The difference in

results can be explained by the different set of ODUF records contained in the Pseudo-CLEC and Qwest adhoc data sources. Therefore, CGE&Y finds that the Qwest adhoc data for time to provide usage records accurately reflects the DUF intervals observed by the Pseudo-CLEC during the functionality test.

7.2 BI-2 – Invoices Delivered Within 10 Days

Definition

The BI-2 measure reflects the percentage of invoices that are transmitted via industry standard electronically bills that are delivered within 10 days.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by dividing the number of invoices on industry standard electronic bills that are delivered within 10 days of the bill date by the total number of invoices on all industry standard electronic bills. For Qwest adhoc data, this measurement is calculated by dividing the number of Pseudo-CLEC invoices with a difference of 10 days or less between the bill and transmit dates by the total number of Pseudo-CLEC invoices.

Results

| Table 7.2.1 – Invoices Delivered Within 10 Days | | |
|--------------------------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| BI-2 | 100% n=5755 | 92.56% n=5755 |

Findings and Conclusions

As explained in AZIWO1211, the difference in results for BI-2 was due to the classification of the invoices associated with 3 electronic CRIS bills in February. Qwest attempted to send these bills, but failed due to lack of authorization. Qwest classified these bills as sent within 10 days for BI-2 purposes. However, the Pseudo-CLEC did not receive these bills until July. CGE&Y found that this constituted a failure by BI-2 standards for the invoices associated with these 3 electronic CRIS bills. Subsequently, Qwest has automated this process so that the technician does not require authorization to create the bills on the CLEC's server.

As a result, this problem did not recur. Therefore, CGE&Y finds that since March, Qwest data for the time to provide invoices on electronic bills is accurately reporting the time to provide electronic bills observed by the Pseudo-CLEC during the functionality test.

7.3 BI-3 – Billing Accuracy – Adjustments for Errors

Definition

The BI-3 measure reflects the percentage of billed revenue that is billed without adjustment for error.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by subtracting the absolute value of the amount of billed revenue adjusted due to error on the Pseudo-CLEC bills from the total billed revenue and dividing by the total billed revenue on the Pseudo-CLEC bills. The total billed revenue was extracted from the Qwest adhoc data. The total billed revenue was verified as part of the billing validation process during the functionality test. For Qwest adhoc data, this measurement is calculated by subtracting the absolute value of adjustment amounts due to error from the total billed revenue and dividing by the total billed revenue on the Pseudo-CLEC bills.

Results

| Table 7.3.1 – Billing Accuracy | | |
|---------------------------------------|----------------------|----------------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| BI-3 | 99.94% n=148434 | 99.94% n=148434 |

Findings and Conclusions

Results for billing accuracy using Qwest adhoc and Pseudo-CLEC data sources produced identical results. Therefore, CGE&Y finds that the Qwest adhoc data for billing adjustments due to error accurately reflects the adjustments due to error observed by the Pseudo-CLEC during the functionality test.

7.4 BI-4 – Billing Completeness

Definition

The BI-4 measure reflects the percentage of nonrecurring and recurring charges associated with completed service orders that appear on the next available bill.

Formula

For Pseudo-CLEC captured data, this measurement is calculated by comparing the SOC date for Pseudo-CLEC service orders with the bill date of the Pseudo-CLEC bill on which the account appears for the first time. The number of service orders that did not appear on the first bill after the SOC date is divided by the total number of new service orders appearing on the Pseudo-CLEC bill. For Qwest adhoc data, this measurement is calculated by dividing the number of Pseudo-CLEC records with a late indicator equal to “Y” by the total number of Pseudo-CLEC records in the adhoc file.

Results

| Table 7.4.1 – Billing Completeness | | |
|------------------------------------|------------------|---------------------|
| Measure | Adhoc Results | Pseudo-CLEC Results |
| BI-4 | 99.23% n=1304 | 97.34% n=1615 |

Findings and Conclusions

Results for billing completeness using Qwest adhoc and Pseudo-CLEC data indicate a difference of 1.89 percent. The Pseudo-CLEC result is based on CGE&Y’s analysis of new service orders on Pseudo-CLEC bills during the functionality test. As explained in AZIWO1214, Qwest acknowledged it did not properly calculate BI-4 during the functionality test. Qwest instituted a fix, and CGE&Y verified that Qwest was properly handling “late orders.”

8 Overall Conclusions

The Functionality Test Results Comparison represents the final step of the most comprehensive validation of an ILEC's §271 performance measurement reporting to date. This three-stage process – Performance Measurement Audit, Functionality Data Reconciliation, and Functionality Test Results Comparison – represents a complete cradle to grave review and validation of Qwest's performance measurement data collection and processing. Based on the results of this extensive data review, CGE&Y finds that Qwest is currently collecting all relevant CLEC performance data, is accurately recording the details of all activities associated with CLEC transactions, and produces accurate performance measurement calculations based on version 6.3 of the PID.

The PMA verified whether Qwest appropriately processes its performance measurement data per the 6.3 PID. CGE&Y independently reproduced Qwest's reported performance results for at least 3 months of data for each performance measure disaggregation. This validated that Qwest accurately applies the business rules and exclusions set forth in version 6.3 of the PID for the calculation of §271 performance measurement results.

CGE&Y's data reconciliation of information provided to the Pseudo-CLEC via gateway notifiers verified that with few exceptions, Qwest included all Pseudo-CLEC activities in its adhoc datasets used for §271 performance measurement data processing. Moreover, the data reconciliation verified that the majority of data elements contained in the Qwest adhoc data matched those captured by the Pseudo-CLEC and CGE&Y. CGE&Y issued 19 IWOs as part of the data reconciliation process. Each of these IWOs was subsequently closed based on Qwest's resolution. In fact, of the discrepancies noted in the data reconciliation report, only Pseudo-CLEC data for BI-2 and BI-4 were found to be materially different from Qwest adhoc data. In these cases, CGE&Y amended results in §2.5 of the Final Report. In addition, Qwest instituted fixes which CGE&Y verified so that Qwest's adhoc data could be relied upon for future results.

The data reconciliation process did not validate all the Qwest adhoc data elements that are used to calculate §271 performance measurement results. The Functionality Test Results Comparison completed the data validation process. For each performance measurement in Appendix C of the MTP, CGE&Y calculated results for a corresponding aggregated measure using data elements available in the Pseudo-CLEC data. CGE&Y compared these results to results calculated using Qwest adhoc data for similarly aggregated measures. The results comparison showed that in most cases, there was a high level of

agreement between results calculated from Qwest adhoc and Pseudo-CLEC data. For those cases where results indicated a difference, CGE&Y issued 7 IWOs. CGE&Y subsequently closed these 7 IWOs based on Qwest's resolution. CGE&Y's analysis did reveal that the due date transmitted to the Pseudo-CLEC via the original FOC did not match the due date recorded in RSOR in a large number of cases (See AZIWO2130). These discrepancies were the result of manual errors on Qwest's part in providing the FOC to the Pseudo-CLEC. The due date provided on the service order was determined per the service interval guide but was different than the due date transmitted via the FOC. CGE&Y validated that Qwest has instituted several quality control mechanisms to ensure FOC accuracy and agreement with the service order due date, and retest results show that discrepancies have been significantly reduced.

CGE&Y's analysis of Functionality Test Measure results did not reveal any significant or systemic errors in data elements contained in the Qwest adhoc data. In fact, discrepancies found were generally due to the Pseudo-CLEC not receiving the same data element that is used for measurement calculation purposes. Therefore, CGE&Y is confident that Qwest's adhoc data is both including all CLEC transactions and the data elements associated with CLEC transactions are accurate and complete.

Based on the findings of the described data validation process CGE&Y finds that Qwest reported performance results accurately reflect performance observed by CLECs. For the most part, the number and severity of discrepancies identified in Qwest's adhoc data were immaterial and had no significant impact on performance results. In those cases where data discrepancies were more severe, CGE&Y verified that Qwest has fixed its processes and is now accurately reporting performance results or is providing the correct data element to the CLEC. Therefore the findings as presented in §2.5 of the final report for the Pseudo-CLEC can be relied on for parity/disparity determinations and aggregate CLEC results can be relied on for parity/disparity determinations going forward based on CGE&Y's validation of Qwest's fixes.